

ORAL ARGUMENT NOT YET SCHEDULED

No. 21-1126 (consolidated with Nos. 21-1136, 21-1142, 21-1149, and 21-1175)

**IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

SOLAR ENERGY INDUSTRIES ASSOCIATION, *et al.*,

Petitioners,

v.

FEDERAL ENERGY REGULATORY COMMISSION,

Respondent,

BROADVIEW SOLAR, LLC; NEWSUN ENERGY LLC;

Respondent-Intervenors.

On Petitions for Review of Orders of the Federal Energy Regulatory
Commission — 174 FERC ¶ 61,199 (March 19, 2021);
175 FERC ¶ 62,100 (May 17, 2021); 175 FERC ¶ 61,228 (June 17, 2021)

JOINT APPENDIX

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Form 556

Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button () for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oir_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do not use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at <http://earth.google.com>), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

Non-Public: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
Public (redacted): Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicant's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.
Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) Broadview Solar LLC		
1b Applicant street address 1612 E Bainbridge Road		
1c City Sandy		1d State/province Utah
1e Postal code 84092	1f Country (if not United States)	1g Telephone number 8017082086
1h Has the instant facility ever previously been certified as a QF? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF17 - 454 - 002		
1j Under which certification process is the applicant making this filing?		
<input checked="" type="checkbox"/> Notice of self-certification (see note below) <input type="checkbox"/> Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3)		
Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.		
1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply)		
<input checked="" type="checkbox"/> Qualifying small power production facility status <input type="checkbox"/> Qualifying cogeneration facility status		
1l What is the purpose and expected effective date(s) of this filing?		
<input type="checkbox"/> Original certification; facility expected to be installed by _____ and to begin operation on _____		
<input checked="" type="checkbox"/> Change(s) to a previously certified facility to be effective on <u>3/11/19</u> (identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)		
<input type="checkbox"/> Name change and/or other administrative change(s) <input type="checkbox"/> Change in ownership <input checked="" type="checkbox"/> Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output		
<input type="checkbox"/> Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)		
1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.		
<input type="checkbox"/> The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19)		
<input type="checkbox"/> The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted		
<input type="checkbox"/> The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)		

Contact Information	2a Name of contact person Ros Rocco Vrba	2b Telephone number 8017082086		
	2c Which of the following describes the contact person's relationship to the applicant? (check one) <p><input checked="" type="checkbox"/> Applicant (self) <input type="checkbox"/> Employee, owner or partner of applicant authorized to represent the applicant</p> <p><input type="checkbox"/> Employee of a company affiliated with the applicant authorized to represent the applicant on this matter</p> <p><input type="checkbox"/> Lawyer, consultant, or other representative authorized to represent the applicant on this matter</p>			
	2d Company or organization name (if applicant is an individual, check here and skip to line 2e) <input type="checkbox"/>			
	Broadview Solar LLC			
	2e Street address (if same as Applicant, check here and skip to line 3a) <input type="checkbox"/> i			
	1612 E Bainbridge Road			
	2f City Sandy	2g State/province Utah		
	2h Postal code 84092	2i Country (if not United States)		
Facility Identification and Location	3a Facility name Broadview Solar LLC			
	3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) <input checked="" type="checkbox"/> i			
	3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.			
	Longitude	<input type="checkbox"/> East (+) <input checked="" type="checkbox"/> West (-) 108.852 degrees	Latitude	<input checked="" type="checkbox"/> North (+) <input type="checkbox"/> South (-) 46.047 degrees
	3d City (if unincorporated, check here and enter nearest city) <input type="checkbox"/>		3e State/province Montana	
	Broadview			
	3f County (or check here for independent city) <input type="checkbox"/>		3g Country (if not United States)	
	Yellowstone			
Transacting Utilities	Identify the electric utilities that are contemplated to transact with the facility.			
	4a Identify utility interconnecting with the facility NorthWestern Energy			
	4b Identify utilities providing wheeling service or check here if none <input checked="" type="checkbox"/> i			
	4c Identify utilities purchasing the useful electric power output or check here if none <input type="checkbox"/> i			
	NorthWestern Energy			
	4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none <input type="checkbox"/> i			
	NorthWestern Energy			

Ownership and Operation	5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.		
	Full legal names of direct owners		
	1) VK Clean Energy Partners LLP	Electric utility or holding company	If Yes, % equity interest
	2)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	100 %
	3)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	%
	4)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	%
	5)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	%
	6)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	%
	7)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	%
	8)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	%
9)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	%	
10)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	%	
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)			
<input type="checkbox"/> Check here if no such upstream owners exist. <input checked="" type="checkbox"/>			
Full legal names of electric utility or holding company upstream owners			
1)	% equity interest		
2)	%		
3)	%		
4)	%		
5)	%		
6)	%		
7)	%		
8)	%		
9)	%		
10)	%		
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
5c Identify the facility operator			
Broadview Solar LLC			



Energy Input	6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)		
	<input type="checkbox"/> Biomass (specify)	<input checked="" type="checkbox"/> Renewable resources (specify)	<input type="checkbox"/> Geothermal
	<input type="checkbox"/> Landfill gas	<input type="checkbox"/> Hydro power - river	<input type="checkbox"/> Fossil fuel (specify)
	<input type="checkbox"/> Manure digester gas	<input type="checkbox"/> Hydro power - tidal	<input type="checkbox"/> Coal (not waste)
	<input type="checkbox"/> Municipal solid waste	<input type="checkbox"/> Hydro power - wave	<input type="checkbox"/> Fuel oil/diesel
	<input type="checkbox"/> Sewage digester gas	<input checked="" type="checkbox"/> Solar - photovoltaic	<input type="checkbox"/> Natural gas (not waste)
	<input type="checkbox"/> Wood	<input type="checkbox"/> Solar - thermal	<input type="checkbox"/> Other fossil fuel (describe on page 19)
	<input type="checkbox"/> Other biomass (describe on page 19)	<input type="checkbox"/> Wind	
	<input type="checkbox"/> Waste (specify type below in line 6b)	<input type="checkbox"/> Other renewable resource (describe on page 19)	<input type="checkbox"/> Other (describe on page 19)
	6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)		
<input type="checkbox"/> Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)			
<input type="checkbox"/> Anthracite culm produced prior to July 23, 1985			
<input type="checkbox"/> Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more			
<input type="checkbox"/> Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more			
Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste			
<input type="checkbox"/> Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste			
<input type="checkbox"/> Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation			
<input type="checkbox"/> Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)			
Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)			
<input type="checkbox"/> Materials that a government agency has certified for disposal by combustion (describe on page 19)			
<input type="checkbox"/> Heat from exothermic reactions (describe on page 19)		<input type="checkbox"/> Residual heat (describe on page 19)	
<input type="checkbox"/> Used rubber tires		<input type="checkbox"/> Plastic materials	
		<input type="checkbox"/> Refinery off-gas	
		<input type="checkbox"/> Petroleum coke	
Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)			
6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).			
Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input	
Natural gas	0 Btu/h	0 %	
Oil-based fuels	0 Btu/h	0 %	
Coal	0 Btu/h	0 %	

Technical Facility Information	<p>Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.</p>	
	7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	160,000 kW
	7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	50,000 kW
	7c Electrical losses in interconnection transformers	4,000 kW
	7d Electrical losses in AC/DC conversion equipment, if any	18,000 kW
	7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	8,000 kW
	7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	80,000.0 kW
	7g Maximum net power production capacity = 7a - 7f	80,000.0 kW
	7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.	 <p>The facility is comprised of a DC coupled solar PV array of 160 MWDC, a 4-hour 50 MWDC battery energy storage system (200 MWh) that will be filled entirely with DC power produced by the solar PV array. The solar array and battery energy storage system reside completely on the DC side of twenty (20) 4MW DC to AC inverters which limit the total power delivered to point of interconnection under the interconnection agreement to no more than 80 MWAC.</p> <p>The Solar Facility consists of Single Axis tracking PV Modules;</p> <p>Likely use of equipment below (the components may change in the future) 471,323 Multi-c-Si Hanwha Q-Cells L-G4.2 340</p> <p>Total capacity 160.0 MW DC Degradation: 0%</p> <p>BESS- Lithium ion energy storage of 50 MWDC with 4-hour storage capability</p> <p>Inverters</p> <p>20 GE 1500V 4MVA</p> <p>Unit capacity 4000 AC kW</p> <p>Input voltage 1500 DC V</p> <p>Total Facility capacity 80.0 MWAC</p>

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations	<p>Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) as amended by Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).</p>																			
	<p>8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.</p>																			
	<p>Check here if no such facilities exist. <input checked="" type="checkbox"/></p>																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Facility location (city or county, state)</th> <th style="text-align: left;">Root docket # (if any)</th> <th style="text-align: left;">Common owner(s)</th> <th style="text-align: left;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1) _____</td> <td>QF - _____</td> <td>_____</td> <td>kW</td> </tr> <tr> <td>2) _____</td> <td>QF - _____</td> <td>_____</td> <td>kW</td> </tr> <tr> <td>3) _____</td> <td>QF - _____</td> <td>_____</td> <td>kW</td> </tr> </tbody> </table>				Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1) _____	QF - _____	_____	kW	2) _____	QF - _____	_____	kW	3) _____	QF - _____	_____	kW
	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity																
	1) _____	QF - _____	_____	kW																
	2) _____	QF - _____	_____	kW																
	3) _____	QF - _____	_____	kW																
	<p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>																			
<p>8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?</p>																				
<p><input type="checkbox"/> Yes (continue at line 8c below) <input checked="" type="checkbox"/> No (skip lines 8c through 8e)</p>																				
<p>8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes <input type="checkbox"/> No <input type="checkbox"/></p>																				
<p>8d Did construction of the facility commence on or before December 31, 1999? Yes <input type="checkbox"/> No <input type="checkbox"/></p>																				
<p>8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes <input type="checkbox"/> No <input type="checkbox"/> If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.</p>																				
Certification of Compliance with Fuel Use Requirements	<p>Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																			
	<p>9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:</p>																			
	<p><input checked="" type="checkbox"/> Applicant certifies that the facility will use fossil fuels exclusively for the purposes listed above.</p>																			
<p>9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:</p>																				
<p>Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																				

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information	<p>Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.</p>	
	<p>10a What type(s) of cogeneration technology does the facility represent? (check all that apply)</p>	
	<input type="checkbox"/> Topping-cycle cogeneration	<input type="checkbox"/> Bottoming-cycle cogeneration
	<p>10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.</p>	
	Check to certify compliance with indicated requirement	Requirement
	<input type="checkbox"/>	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
	<input type="checkbox"/>	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
	<input type="checkbox"/>	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
	<input type="checkbox"/>	Diagram must specify average gross electric output in kW or MW for each generator.
	<input type="checkbox"/>	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
	<input type="checkbox"/>	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
	<input type="checkbox"/>	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
	<input type="checkbox"/>	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at make-up water inputs.	

**EPAct 2005 Requirements for Fundamental Use
of Energy Output from Cogeneration Facilities**

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes No

11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes No

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

Yes (continue at line 11d below)

No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

No. Applicant certifies that energy will not be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) before selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g / (11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing

the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to

comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.





Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output	<p>The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.</p>		
	<p>12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use <i>in separate rows</i>.</p>		
	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
	1)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	2)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	3)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	4)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
	5)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
6)	Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h	
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
<p>12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>			

Topping-Cycle Operating and Efficiency Value Calculation

<p>Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.</p> <p>If you indicated in line 10a that your facility represents <i>both</i> topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.</p>		
13a	Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b	Indicate the annual average rate of net electrical energy output	kW
13c	Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
13d	Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
13e	Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
13f	Indicate the annual average rate of energy input from natural gas and oil	Btu/h
13g	Topping-cycle operating value = $100 * 13a / (13a + 13c + 13e)$	0 %
13h	Topping-cycle efficiency value = $100 * (0.5 * 13a + 13c + 13e) / 13f$	0 %
13i	Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	
<input type="checkbox"/> Yes (complies with operating standard) <input type="checkbox"/> No (does not comply with operating standard)		
13j	Did installation of the facility in its current form commence on or after March 13, 1980?	
<input type="checkbox"/> Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.		
<input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.		
13k	Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 45%:	
<input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)		
13l	Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:	
<input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)		



Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output															
<p>The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.</p>															
<p>14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process <i>in separate rows</i>.</p> <table border="1"> <thead> <tr> <th>Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production</th> <th>Thermal host's relationship to facility; Thermal host's process type</th> <th>Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)</th> </tr> </thead> <tbody> <tr> <td>1)</td> <td>Select thermal host's relationship to facility Select thermal host's process type</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td>2)</td> <td>Select thermal host's relationship to facility Select thermal host's process type</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td>3)</td> <td>Select thermal host's relationship to facility Select thermal host's process type</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> </tbody> </table> <p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>				Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)	1)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>	2)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>	3)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>
Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)													
1)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>													
2)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>													
3)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>													
<p>14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>															

Bottoming-Cycle Operating and Efficiency Value Calculation

<p>Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.</p> <p>If you indicated in line 10a that your facility represents <i>both</i> topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).</p>	
<p>15a Did installation of the facility in its current form commence on or after March 13, 1980?</p> <p><input type="checkbox"/> Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.</p> <p><input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.</p>	
15b Indicate the annual average rate of net electrical energy output	kW
15c Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
15e Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
15f Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
15g Bottoming-cycle efficiency value = $100 * (15c + 15e) / 15f$	0 %
<p>15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:</p> <p><input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)</p>	

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

He or she has read the filing, including any information contained in any attached documents, such as cogeneration

mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.

He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.

He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)

The person on whose behalf the filing is made

An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made

An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made

A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign

He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.

He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature

Ros Rocco Vrba

Your address

1612 E Bainbridge Road
Sandy, Utah 84092

Date

3/13/2019

Audit Notes

Commission Staff Use Only:



Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Changes were made to the following sections:

IL- effective date change

Ii- up dated docket number

7a, 7b, 7c, 7d, 7e, 7f, 7g, 7h- plant DC/AC production, plant losses, BESS, system configuration

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar LLC) **Docket No. QF17-454-**__

**APPLICATION FOR CERTIFICATION OF
QUALIFYING SMALL POWER PRODUCTION FACILITY STATUS**

Pursuant to Section 292.207(b) of the regulations of the Federal Energy Regulatory Commission (“FERC” or the “Commission”),¹ Broadview Solar LLC (“Applicant,” “Broadview Solar”) respectfully submits this application for certification of a solar photovoltaic (“PV”) and battery storage facility under development in Yellowstone County, Montana (the “Facility”) as a qualifying small power production facility (“QF”) within the meaning of the Public Utility Regulatory Policies Act of 1978, as amended (“PURPA”). The Facility will interconnect to the transmission system owned and operated by NorthWestern Corporation d/b/a Northwest Energy (“NorthWestern”). The Facility will have a maximum net power production capacity of 80 MW and will use solar energy as its primary energy source.

¹ 18 C.F.R. § 292.207(b) (2018).

I. COMMUNICATIONS

Applicant requests that all correspondence, pleadings and other communications concerning this filing be served upon the following individuals who should be included on the official service list in this proceeding:²

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Counsel for Broadview Solar LLC

II. THE FACILITY SATISFIES THE QF CAPACITY CRITERIA

As stated in the Form 556 set forth in Attachment A, and in the affidavit of Lloyd Pasley set forth in Attachment B (“Pasley Affidavit”), the Facility will be comprised of a direct current (“dc”) coupled array of solar PV panels with a gross capacity of 160 MW(dc) and a four-hour 50 MW(dc) battery energy storage system (200 MWh) (“BESS”) that will be charged entirely from the solar array. At their terminals, the solar PV panels and BESS connect to twenty 4.127 MW(dc) to alternating current (“ac”) inverters. Because the solar facility and the BESS will be attached at their terminals to the inverters, the maximum gross output of the Facility at its inverters will be approximately 82.5 MW(ac).³ After deducting Facility loads and losses, the

² To the extent necessary, Applicant requests waiver of Rule 203(b)(3) of the Commission’s regulations, 18 C.F.R. § 385.203(b)(3), so that a copy of any communications in this proceeding may be served on all persons listed above.

³ Broadview has entered into a Standard Large Interconnection Agreement (“LGIA”) with NorthWestern. Appendix C of this LGIA which identifies the Broadview Facility as having a capacity of 80 MW. If the capacity of the Facility were greater than 80 MW, Broadview would be required to obtain more than 80 MW of interconnection service. That the LGIA is for 80 MW confirms Applicant’s characterization of the Facility as having a capacity of 80 MW.

maximum net power production of the Facility, as measured at the point of interconnection, will be 80 MW(ac). Accordingly, the Facility complies with the 80 MW limit imposed by the PURPA and the Commission's regulations, specifically Section 292.204(a).⁴

Commission precedent establishes that a small power production facility's capacity is the maximum net output that the facility can safely and reliably achieve at the point of interconnection.⁵ The Commission has stated that it determines capacity based on the "net output" of a facility – i.e., its "send out after subtraction of the power used to operate auxiliary equipment in the facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and exciters) and for other essential electricity uses in the facility from the gross generator output."⁶ In *Occidental Geothermal*, the Commission stated that it will not focus on the nominal rating of generating equipment in the facility, because output may vary based on operating conditions.⁷ Moreover, the Commission stated that:

[A] facility's power production capacity is not necessarily determined by the nominal rating of even a key component of the facility. For example, while economy dictates that a large facility be built so that all of its components have nearly the same operating limits, thus minimizing the costs of unutilized component capabilities, it is not uncommon for smaller facilities to find it most economic to employ commercially available components some of which have individual capabilities significantly exceeding the overall facility capabilities.⁸

Applying this holding to the Facility, the size and capability of individual components that will comprise the Facility, including the solar array and the BESS, are not relevant to the

⁴ 18 C.F.R. § 292.204(a).

⁵ See *Conn. Valley Elec. Co., Inc. v. Wheelabrator Claremont Co., L.P.*, 82 FERC ¶ 61,116, at 61,421 n.25 (1988) (defining "net capacity" as "the maximum net output that the facility can safely and reliably achieve at the point of interconnection under the most favorable operating conditions likely to occur over a period of several years").

⁶ *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231, at 61,445 (1981) ("*Occidental Geothermal*").

⁷ *Id.*

⁸ *Id.*

determination of the capacity of the Facility. What is determinative of Facility capacity is the net send out, which cannot exceed 80 MW.

Further, in *Occidental Geothermal*, the Commission rejected claims that QF status should be denied because the applicant had artificially limited the output of the facility to 80 MW in order to obtain QF status, stating that “the statute and the rules do not require that a facility be sized to achieve the maximum output of an energy resource.”⁹ Here the Facility will be sized to have a maximum net capacity of 80 MW, while sizing the solar array and the BESS components to permit increased or time-shifted production of energy (MWh) within the 80 MW capacity limit. As explained further in the Pasley affidavit, oversizing the solar array and combining it with battery storage also increases the capacity factor of the project. Whereas a typical solar PV facility might have a capacity factor of approximately 25 percent, by adding additional solar arrays and supplementing with battery storage, Applicant will be able to achieve a capacity factor [closer to approximately 40 percent]. The Facility’s net output cannot and will never exceed 80 MW, but it will be capable of sustaining its maximum output for additional hours in the day.

With respect to the size of the individual components, the Facility is configured to optimize energy (MWh) from the solar arrays subject to the Facility’s 80 MW limit on output by including additional solar panels. In addition, the Facility is designed to optimize the value of its MWh production by including the BESS, which will be capable of storing and shifting production to extend hours of production beyond daylight hours. Consistent with the Commission’s *Occidental Geothermal* decision, because the solar arrays and the BESS are located behind the dc to ac inverters, which limit the maximum gross power production capacity

⁹ *Id.*

of the Facility to 82.5 MW, and taking into account Facility loads and losses, the Facility satisfies the 80 MW limit regardless of the size of individual components or of how the Facility is operated.

Adding storage capability to the dc side of the Facility does not affect the Facility's maximum net power production capacity. As noted, the Facility's solar array will provide all of the charging energy used for the BESS. Energy from the BESS will be discharged during periods when there is no or diminished solar production. Because the terminals of the BESS, like the solar array, connect directly to the dc side of the inverters, ac power from the Facility delivered to the point of interconnection cannot and does not ever exceed 80 MW. In contrast to a wind/battery facility that can generate and store alternating current that could physically be provided to the point of interconnection at more than 80 MW, the Facility will generate and store power as direct current energy, which must be converted to alternating current before the point of interconnection. For the Facility, as explained in detail in the Pasley Affidavit, this is done through 20 4.127 MW inverters, resulting in a combined maximum gross output of 82.5 MW(ac) and a maximum net capacity of 80 MW(ac) that can be safely produced and delivered to the point of interconnection.

Consistent with Section 292.204(b) of its regulations, the Commission has determined that a battery storage device qualifies as a QF if it is charged at least 75 percent by a qualifying fuel source, such as solar.¹⁰ As explained herein and in the Pasley Affidavit, the BESS will be charged exclusively with power from the solar pv arrays of the Facility. To the extent the Commission views the BESS and the solar pv arrays as two separate QFs, and that their separate power production capacities should be aggregated in accordance with Section 292.204(a) of the

¹⁰ 18 C.F.R. § 292.204(b); see also *Luz Dev. and Finance Corp.*, 51 FERC ¶ 61,078, at 61,171 (1990).

Commission's regulations, Applicant states that such treatment would only artificially inflate the aggregate capacity of the Facility components. Because the inverters can convert no more than 82.5 MW(ac) of power from the Facility, the maximum gross power production capacity of the BESS, when aggregated with the gross power production capacity of the solar pv arrays will be 82.5 MW(ac). Similarly, the maximum gross power production capacity of the solar pv arrays when aggregated with the BESS is 82.5 MW(ac). Under both circumstances, the net power production capacity of Facility to the point of delivery will be 80 MW(ac) when adjusted for load and line losses.

Form 556 requires the QF to indicate "the maximum gross and net electric power production capacity of Facility at the point of delivery" in items 7a-7e. As explained in the Pasely Affidavit, "behind" (on the dc side of) the inverters, the Facility includes 160,000 kW dc of solar modules and 50,000 kw dc of energy storage. However, because the solar inverters limit the gross output of the combined solar-plus-storage Facility to 82,548 kW at the solar pv and BESS terminals, the "maximum gross electric power production capacity at the terminals" is 82,548 kW. This is a physical limitation. Unlike a configuration relying on SCADA or other automated generation control to limit the gross electric power production capacity of a facility, Applicant will not be able to program the Facility's inverters to convert any more gross output from the solar pv and BESS terminals.¹¹ The maximum capacity that the inverters will be physically capable of converting from dc to ac, within the manufacturer's specifications, will be

¹¹ The Commission has held that a facility with a peak capacity that exceeds 80 MW can still satisfy the size criteria of QF status if it uses a distributed control system or other device to "limit the maximum net at the point of delivery to 80 MW." *Coso Fin. Partners (Navy I Facility), Small Power Prod. & Cogeneration Facilities-Qualifying Status*, 65 FERC ¶ 62,170, at 64,386 (1993). Applicant will not rely on such a control device to limit its capacity. Rather, as described herein and in the Pasley Affidavit, the output of the Facility will be physically constrained to the capacity of the inverters.

82,548 kW. The inverters can be programmed to convert less output, but they are physically incapable of converting more. The only way that the capacity of the Facility could be increased is if the Applicant were to add additional inverters.¹² That scenario, however, is not the configuration for which Applicant is seeking certification. As discussed above, as established in *Occidental Geothermal*, the Applicant has the right to determine the size and capacity of the small power production facility for which it is seeking certification; the fact that a larger facility could or could not be proposed is not relevant to the determination of the qualifying status of this facility that is proposed.

As explained in the Pasely Affidavit, when there is more dc power available from the solar array than can be converted to ac power by the inverters, that power is stored in the BESS; it is not available to the point of delivery. And if there is more dc power capable of being produced by the solar array than can be converted to ac power through the inverters or stored in the BESS, the solar inverter will cause the solar array to produce less power. The result of this configuration and operating mode is that the gross capacity of the Facility is properly stated as 82,548 kW, rather than as the sum of the capacity of the solar array and the BESS, since that capacity cannot be provided to the point of delivery.

For line 7b, parasitic station power, the Pasely Affidavit explains that all of the ac losses in the inverters are netted out before the inverter terminals; thus, parasitic station power is 0 kW. The substation electrical enclosure will on average use 45 kW and the average HVAC loads for BESS will be 1200 kW, which totals 1245 kW.

¹² As noted above, the LGIA provides for interconnection capacity of up to 80 MW. If Applicant were to add additional inverters to the Facility, it would represent a material modification of the Facility under the LGIA.

For line 7c, electrical losses in interconnection transformers, the Pasely Affidavit explains that the “No Load Losses” (seen whenever the transformers are energized) are expected to be 133 kW. The load losses when the Facility is at full output (80 MW) are expected to be 667 kW. Thus, the total transformer AC electrical losses are 800 kW.

For line 7d, electric losses in AC/DC conversion equipment, the Pasely Affidavit explains that the AC/DC conversion losses are 1,978 kW; however, these are netted out before getting to the inverter terminals and thus are included in the 20 x 4127 kWac above and are, thus, effectively 0 kWac for this calculation.

For line 7e, other interconnection losses, the Pasely Affidavit explains that this category includes such things as the ac cables that connect the solar inverters to the project substation etc.

Based on the foregoing, Line 7g shows the Facility’s maximum net power production capacity as 80,000 kW.

Recognizing the limitation of the solar inverters, the Facility’s load and line losses, and Applicant’s interconnection capacity rights under its LGIA, the aggregate capacity of the Facility cannot exceed 80 MW(ac) when measured at the point of interconnection. The Commission has clarified that “the electric power production capacity of the facility is the capacity that the electric power production equipment delivers to the point of interconnection with the purchasing electric utility’s transmission system.”¹³ Consistent with this holding, Applicant satisfies the capacity criteria for QF status.

¹³ *Malacha Power Product, Inc.*, 41 FERC

III. Conclusion

Because the Facility will be physically incapable of safely delivering more than 80 MW to the point of interconnection, its maximum net power production capacity does not exceed 80 MW. As a result, the Facility will satisfy the requirements of Section 292.204(a) of the Commission's rules. The Facility satisfies all other requirements of the Commission's rules. Applicant accordingly requests that the Commission promptly issue an order granting this application.

Respectfully submitted,

/s/ Adam Wenner

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Counsel for Broadview Solar LLC

Dated: September 11, 2019

Attachments

ATTACHMENT A

Revised Form 556
Broadview Solar LLC

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button () for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oir_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do not use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at <http://earth.google.com>), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

Non-Public: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
Public (redacted): Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicant's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.
Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) Broadview Solar LLC		
1b Applicant street address 5444 Westheimer Road Suite 1000		
1c City Houston	1d State/province TX	
1e Postal code 77056	1f Country (if not United States)	1g Telephone number 401-497-7566
1h Has the instant facility ever previously been certified as a QF? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF17 - 454 - 003		
1j Under which certification process is the applicant making this filing?		
<input type="checkbox"/> Notice of self-certification (see note below) <input checked="" type="checkbox"/> Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3)		
Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.		
1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply)		
<input checked="" type="checkbox"/> Qualifying small power production facility status <input type="checkbox"/> Qualifying cogeneration facility status		
1l What is the purpose and expected effective date(s) of this filing?		
<input type="checkbox"/> Original certification; facility expected to be installed by _____ and to begin operation on _____		
<input checked="" type="checkbox"/> Change(s) to a previously certified facility to be effective on <u>8/1/19</u> (identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)		
<input type="checkbox"/> Name change and/or other administrative change(s) <input checked="" type="checkbox"/> Change in ownership <input checked="" type="checkbox"/> Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output		
<input type="checkbox"/> Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)		
1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.		
<input type="checkbox"/> The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19)		
<input type="checkbox"/> The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted		
<input type="checkbox"/> The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)		

Contact Information	2a Name of contact person Steve Vavrik	2b Telephone number 401-497-7566
	2c Which of the following describes the contact person's relationship to the applicant? (check one) <p><input type="checkbox"/> Applicant (self) <input checked="" type="checkbox"/> Employee, owner or partner of applicant authorized to represent the applicant</p> <p><input type="checkbox"/> Employee of a company affiliated with the applicant authorized to represent the applicant on this matter</p> <p><input type="checkbox"/> Lawyer, consultant, or other representative authorized to represent the applicant on this matter</p>	
	2d Company or organization name (if applicant is an individual, check here and skip to line 2e) <input type="checkbox"/>	
	Broadview Solar LLC	
	2e Street address (if same as Applicant, check here and skip to line 3a) <input checked="" type="checkbox"/>	
	2f City	2g State/province
	2h Postal code	2i Country (if not United States)
	3a Facility name Broadview Solar LLC	
	3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) <input checked="" type="checkbox"/>	
3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional. Longitude <input type="checkbox"/> East (+) <input checked="" type="checkbox"/> West (-) 108.852 degrees Latitude <input checked="" type="checkbox"/> North (+) <input type="checkbox"/> South (-) 46.047 degrees		
3d City (if unincorporated, check here and enter nearest city) <input type="checkbox"/> Broadview		
3e State/province Montana		
3f County (or check here for independent city) <input type="checkbox"/> Yellowstone	3g Country (if not United States)	
Identify the electric utilities that are contemplated to transact with the facility.		
4a Identify utility interconnecting with the facility NorthWestern Energy		
4b Identify utilities providing wheeling service or check here if none <input checked="" type="checkbox"/>		
4c Identify utilities purchasing the useful electric power output or check here if none <input type="checkbox"/> Rocky Mountain Power, LLC		
4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none <input type="checkbox"/> NorthWestern Energy		

Ownership and Operation	5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.		
	Full legal names of direct owners		
	1) Broadview Solar LLC	Electric utility or holding company	If Yes, % equity interest
	2)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	100 %
	3)	Yes <input type="checkbox"/> No <input type="checkbox"/>	%
	4)	Yes <input type="checkbox"/> No <input type="checkbox"/>	%
	5)	Yes <input type="checkbox"/> No <input type="checkbox"/>	%
	6)	Yes <input type="checkbox"/> No <input type="checkbox"/>	%
	7)	Yes <input type="checkbox"/> No <input type="checkbox"/>	%
	8)	Yes <input type="checkbox"/> No <input type="checkbox"/>	%
9)	Yes <input type="checkbox"/> No <input type="checkbox"/>	%	
10)	Yes <input type="checkbox"/> No <input type="checkbox"/>	%	
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)			
<input type="checkbox"/> Check here if no such upstream owners exist. 			
Full legal names of electric utility or holding company upstream owners			
1) VK Clean Energy Partners, LLP	% equity interest		
2) Broad Reach Power LLC	100 %		
3)		%	
4)		%	
5)		%	
6)		%	
7)		%	
8)		%	
9)		%	
10)		%	
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
5c Identify the facility operator			
Broadview Solar LLC			

Energy Input	6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)		
	<input type="checkbox"/> Biomass (specify)	<input checked="" type="checkbox"/> Renewable resources (specify)	<input type="checkbox"/> Geothermal
	<input type="checkbox"/> Landfill gas	<input type="checkbox"/> Hydro power - river	<input type="checkbox"/> Fossil fuel (specify)
	<input type="checkbox"/> Manure digester gas	<input type="checkbox"/> Hydro power - tidal	<input type="checkbox"/> Coal (not waste)
	<input type="checkbox"/> Municipal solid waste	<input type="checkbox"/> Hydro power - wave	<input type="checkbox"/> Fuel oil/diesel
	<input type="checkbox"/> Sewage digester gas	<input checked="" type="checkbox"/> Solar - photovoltaic	<input type="checkbox"/> Natural gas (not waste)
	<input type="checkbox"/> Wood	<input type="checkbox"/> Solar - thermal	<input type="checkbox"/> Other fossil fuel (describe on page 19)
	<input type="checkbox"/> Other biomass (describe on page 19)	<input type="checkbox"/> Wind	
	<input type="checkbox"/> Waste (specify type below in line 6b)	<input type="checkbox"/> Other renewable resource (describe on page 19)	<input type="checkbox"/> Other (describe on page 19)
	6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)		
<input type="checkbox"/> Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)			
<input type="checkbox"/> Anthracite culm produced prior to July 23, 1985			
<input type="checkbox"/> Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more			
<input type="checkbox"/> Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more			
Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste			
<input type="checkbox"/> Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste			
<input type="checkbox"/> Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation			
<input type="checkbox"/> Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)			
Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)			
<input type="checkbox"/> Materials that a government agency has certified for disposal by combustion (describe on page 19)			
<input type="checkbox"/> Heat from exothermic reactions (describe on page 19)		<input type="checkbox"/> Residual heat (describe on page 19)	
<input type="checkbox"/> Used rubber tires		<input type="checkbox"/> Plastic materials	
		<input type="checkbox"/> Refinery off-gas	
		<input type="checkbox"/> Petroleum coke	
Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)			
6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).			
Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input	
Natural gas	0 Btu/h	0 %	
Oil-based fuels	0 Btu/h	0 %	
Coal	0 Btu/h	0 %	

Technical Facility Information	<p>Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.</p>	
	7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	82,548 kW
	7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	1,245 kW
	7c Electrical losses in interconnection transformers	800 kW
	7d Electrical losses in AC/DC conversion equipment, if any	0 kW
	7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	503 kW
	7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	2,548.0 kW
	7g Maximum net power production capacity = 7a - 7f	80,000.0 kW
	7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.	
<p>The Facility will be comprised of a DC coupled solar PV array of 160 MWDC, a 4-hour 50MWDC battery energy storage system (200 MWh) that will be charged entirely with DC power produced by the solar PV array. The solar array and battery energy storage system will reside completely on the DC side of twenty (20) 4MW DC to AC inverters, which limit the total power delivered to point of interconnection under the interconnection agreement with Northwestern Energy to no more than 80 MWAC.</p> <p>The Solar Facility consists of Single Axis tracking PV Modules.</p> <p>Likely use of equipment below (the components may change in the future).</p> <p>471,323 Multi-c-Si Hanwha Q-Cells L-G4.2 340</p> <p>Total capacity of Solar Facility (not accounting for limitation based on solar inverters): 160.0 MW</p> <p>DC Degradation: 0%</p> <p>BESS - Lithium ion energy storage of 50 MWDC with 4-hour storage capability (not accounting for limitation based on solar inverters)</p> <p>Inverters</p> <p>20 GE 1500V 4MVA</p> <p>Unit capacity: 4000 AC kW</p> <p>Input voltage: 1500 DC V</p> <p>Total Facility capacity: 80.0 MWAC</p>		

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations	<p>Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) as amended by Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).</p>																			
	<p>8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.</p>																			
	<p>Check here if no such facilities exist. <input checked="" type="checkbox"/></p>																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Facility location (city or county, state)</th> <th style="text-align: left;">Root docket # (if any)</th> <th style="text-align: left;">Common owner(s)</th> <th style="text-align: left;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1) _____</td> <td>QF - _____</td> <td>_____</td> <td>kW</td> </tr> <tr> <td>2) _____</td> <td>QF - _____</td> <td>_____</td> <td>kW</td> </tr> <tr> <td>3) _____</td> <td>QF - _____</td> <td>_____</td> <td>kW</td> </tr> </tbody> </table>				Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1) _____	QF - _____	_____	kW	2) _____	QF - _____	_____	kW	3) _____	QF - _____	_____	kW
	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity																
	1) _____	QF - _____	_____	kW																
	2) _____	QF - _____	_____	kW																
	3) _____	QF - _____	_____	kW																
	<p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>																			
<p>8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?</p>																				
<p><input type="checkbox"/> Yes (continue at line 8c below) <input checked="" type="checkbox"/> No (skip lines 8c through 8e)</p>																				
<p>8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes <input type="checkbox"/> No <input type="checkbox"/></p>																				
<p>8d Did construction of the facility commence on or before December 31, 1999? Yes <input type="checkbox"/> No <input type="checkbox"/></p>																				
<p>8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes <input type="checkbox"/> No <input type="checkbox"/> If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.</p>																				
Certification of Compliance with Fuel Use Requirements	<p>Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																			
	<p>9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:</p>																			
	<p><input checked="" type="checkbox"/> Applicant certifies that the facility will use fossil fuels exclusively for the purposes listed above.</p>																			
<p>9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:</p>																				
<p>Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																				

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information	<p>Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.</p>	
	<p>10a What type(s) of cogeneration technology does the facility represent? (check all that apply)</p>	
	<input type="checkbox"/> Topping-cycle cogeneration	<input type="checkbox"/> Bottoming-cycle cogeneration
	<p>10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.</p>	
	Check to certify compliance with indicated requirement	Requirement
	<input type="checkbox"/>	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
	<input type="checkbox"/>	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
	<input type="checkbox"/>	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
	<input type="checkbox"/>	Diagram must specify average gross electric output in kW or MW for each generator.
	<input type="checkbox"/>	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
	<input type="checkbox"/>	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
	<input type="checkbox"/>	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
	<input type="checkbox"/>	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at make-up water inputs.	

**EPAct 2005 Requirements for Fundamental Use
of Energy Output from Cogeneration Facilities**

<p>EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.</p>	
<p>11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes <input type="checkbox"/> No <input type="checkbox"/></p>	
<p>11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes <input type="checkbox"/> No <input type="checkbox"/></p>	
<p>If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.</p>	
<p>11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?</p>	
<p><input type="checkbox"/> Yes (continue at line 11d below)</p>	
<p>No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be <input type="checkbox"/> subject to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.</p>	
<p>11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?</p>	
<p>Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to <input type="checkbox"/> the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.</p>	
<p>No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the <input type="checkbox"/> applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.</p>	
<p>11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?</p>	
<p><input type="checkbox"/> Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.</p>	
<p>No. Applicant certifies that energy will not be sold pursuant to section 210 of PURPA. Applicant also certifies <input type="checkbox"/> its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) before selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.</p>	
<p>11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?</p>	
<p>Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the <input type="checkbox"/> requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.</p>	
<p>No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the <input type="checkbox"/> requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.</p>	

EPAct 2005 Requirements from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g / (11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing

the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to

comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.





Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output	The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.		
	12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use <i>in separate rows</i> .		Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	
1)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
2)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
3)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
4)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
5)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
6)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.			

Topping-Cycle Operating and Efficiency Value Calculation

<p>Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.</p> <p>If you indicated in line 10a that your facility represents <i>both</i> topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.</p>		
13a	Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b	Indicate the annual average rate of net electrical energy output	kW
13c	Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
13d	Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
13e	Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
13f	Indicate the annual average rate of energy input from natural gas and oil	Btu/h
13g	Topping-cycle operating value = $100 * 13a / (13a + 13c + 13e)$	0 %
13h	Topping-cycle efficiency value = $100 * (0.5 * 13a + 13c + 13e) / 13f$	0 %
13i	Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	
<input type="checkbox"/> Yes (complies with operating standard) <input type="checkbox"/> No (does not comply with operating standard)		
13j	Did installation of the facility in its current form commence on or after March 13, 1980?	
<input type="checkbox"/> Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.		
<input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.		
13k	Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 45%:	
<input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)		
13l	Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:	
<input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)		



Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output															
<p>The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.</p>															
<p>14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process <i>in separate rows</i>.</p> <table border="1"> <thead> <tr> <th>Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production</th> <th>Thermal host's relationship to facility; Thermal host's process type</th> <th>Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)</th> </tr> </thead> <tbody> <tr> <td>1)</td> <td>Select thermal host's relationship to facility Select thermal host's process type</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td>2)</td> <td>Select thermal host's relationship to facility Select thermal host's process type</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td>3)</td> <td>Select thermal host's relationship to facility Select thermal host's process type</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> </tbody> </table> <p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>				Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)	1)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>	2)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>	3)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>
Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)													
1)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>													
2)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>													
3)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>													
<p>14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>															

<p>Bottoming-Cycle Operating and Efficiency Value Calculation</p>	<p>Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.</p> <p>If you indicated in line 10a that your facility represents <i>both</i> topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).</p>	
	<p>15a Did installation of the facility in its current form commence on or after March 13, 1980?</p> <p><input type="checkbox"/> Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.</p> <p><input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.</p>	
	<p>15b Indicate the annual average rate of net electrical energy output</p>	kW
	<p>15c Multiply line 15b by 3,412 to convert from kW to Btu/h</p>	0 Btu/h
	<p>15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)</p>	hp
	<p>15e Multiply line 15d by 2,544 to convert from hp to Btu/h</p>	0 Btu/h
	<p>15f Indicate the annual average rate of supplementary energy input from natural gas or oil</p>	Btu/h
	<p>15g Bottoming-cycle efficiency value = $100 * (15c + 15e) / 15f$</p>	0 %
	<p>15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:</p>	
	<input type="checkbox"/> Yes (complies with efficiency standard)	<input type="checkbox"/> No (does not comply with efficiency standard)

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

He or she has read the filing, including any information contained in any attached documents, such as cogeneration

mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.

He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.

He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)

The person on whose behalf the filing is made

An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made

An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made

A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign

He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.

He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature

Steve Vavrik

Your address

5444 Westheimer Road, Suite 1000
Houston, TX 77056

Date

9/11/2019

Audit Notes

Commission Staff Use Only:



JA047

Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 11:

The purpose of this filing is to report a change in upstream ownership and changes in the maximum gross power production capacity of the facility and other technical facility information. See Line 5b and Lines 7a through 7h.

ATTACHMENT B

Affidavit of Lloyd Pasley

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar LLC

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Docket No. QF17-454-__

AFFIDAVIT OF LLOYD BADEN PASLEY

I. Qualifications and Summary

1. My name is Lloyd Baden Pasley. I am the founder of Superna Energy LLC, which was formed to provide engineering services to the renewable energy sector. I have been in my current role for 15 years. My business address is 2108 Shadowbrook Drive, Wall, NJ 07719.
2. I received a Bachelor of Engineering from the University of Auckland, New Zealand. I received a Master of Engineering from the University of Canterbury, New Zealand. I am a member of Engineering New Zealand, a Chartered Professional Engineer in New Zealand and on the register of International Professional Engineers.
3. I have nearly 32 years of design and practical field experience in renewable energy in North, Central and South America, the Pacific, Asia, Europe and South Africa. I joined DesignPower NZ in 1987 as part of their renewable energy team, which was focused on hydroelectric, geothermal and wind power generation. In 1998, DesignPower NZ was purchased by Parsons Brinckerhoff, headquartered in New York, NY. Thereafter, I transferred to the United States to develop Parsons Brinckerhoff's wind power business. In 2004, I founded Superna Energy to provide engineering services to other renewable energy developers.

4. I am providing this Affidavit in support of the Application for Certification of Qualifying Small Power Production Facility Status (“Application”) submitted on behalf Broadview Solar LLC (“Applicant” or “Broadview Solar”) in the above-captioned proceeding. As stated in the Application, Broadview Solar is developing a hybrid solar photovoltaic (“PV”) generating facility and battery energy storage system (“BESS”) in Yellowstone County, Montana (the “Facility”). The solar PV facility will have a gross generating capacity of 160 megawatts (“MW”) direct current (“dc”). The BESS, which will be charged exclusively with power from the solar PV facility on the dc side of the solar inverters, will have a maximum capacity of 50 MW (dc) over any four-hour period, yielding 200 MWh of energy. Any energy produced by the solar PV facility that is not used to charge the BESS, and any energy discharged from the BESS, must pass through twenty (20) 4.2 megavolt amperes (“MVA”) dc to alternating current (“ac”) inverters before delivering any power to the point of interconnection with the transmission system owned and operated by Northwestern Corporation d/b/a Northwestern Energy (“Northwestern”). Accordingly, as further explained below, even though combined gross direct current (“DC”) generating capacities of the solar PV and BESS facilities exceed 80 MW, it is physically impossible for the Facility to deliver more than 80 MW to its point of interconnection.

II. Configuration of the Facility

5. As mentioned above, the terminals of the solar array and the BESS that comprise the Facility will connect directly to twenty (20) 4.2 MVA solar inverters, which will convert power produced by the solar array or exported from the BESS from dc to ac. Thus, these solar inverters are the “gateway” between the dc power provided from by the Facility and the ac grid and limit the maximum amount of power that can be exported to the grid.

6. The image below represents the planned configuration of the Facility (albeit for a smaller project). As shown below, the ac grid will be electrically connected only to the ac side of the solar inverter. Accordingly, any power that flows to the ac grid (where the point of interconnection is) must pass through the solar inverter.

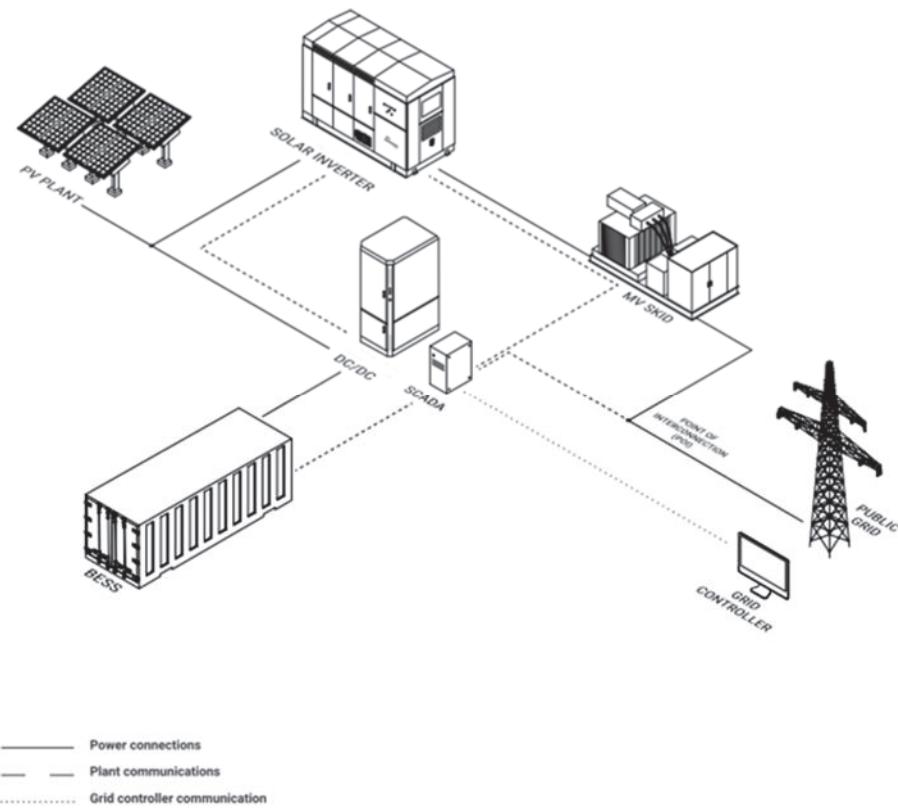


Image Courtesy of Power Electronics

7. The design concept for the Facility is that the solar modules under ideal conditions (25 degrees Celsius and 1000W/m² of irradiation) will be able to produce 160 MW dc at the modules. This power is delivered over the dc string wire to its terminal on the dc side of the inverter, where it can be delivered to the ac grid via the dc/ac solar inverter or stored in the BESS via the dc/dc converter. The voltage, and hence the current in the solar string wire, is adjusted by the solar inverter to maximize the module production on a

moment by moment basis. Thus, the voltage in the string wire goes up and down throughout the day and the year as ambient temperature and solar irradiation changes. This is relevant because the voltage on the solar string wire is often not ideal for the charging and discharging of the batteries in the BESS. To resolve this issue, the industry has developed dc/dc converters (also known as dc coupled inverters). The sole purpose of these dc/dc converters is to adjust the voltage from the solar string wire voltage to the “ideal” voltage for the batteries. Thus, even though there are 50 MW(dc) of dc-to-dc converters, they are there only to manage the voltage between the solar string wire and the battery system, they are not connected to the ac system (other than through the solar inverters) and thus cannot directly export power to the ac grid without this power first passing through the solar inverters.

8. As configured, the maximum gross power capacity of the Facility – *i.e.* power that can be delivered to the ac grid – is limited to that which the solar inverter can deliver, which in this case is 20 x 4.2 MVA. The reason I use MVA for the solar inverter rating and not MW is that these devices are current-limited devices where the current limit is set by the safe operating temperature of the power electronics used to convert dc power to ac power. The inverter can use this current to deliver real or reactive power but only up to this MVA rating.
9. The capacity limitations imposed by the solar inverter are physical. Applicant is unable to use the solar inverters to convert additional power from the Facility or deliver additional power to the point of interconnection and remain within the manufacturer’s warranty. Accordingly, the only way Applicant could increase the ac output of the Facility is by adding additional inverters.

10. It should also be noted that the solar inverter selected for the project is uni-directional and, thus, only dc power can be converted to ac power, but ac power cannot be converted to dc power, thus it is not possible to charge the BESS from the ac grid using this device.
11. The Facility is designed to maximize its capacity factor, not to deliver energy in excess of 80 MW to the point of interconnection. A typical solar project has a capacity factor of approximately 25 to 30 percent. By increasing the dc capacity of the solar arrays and adding the dc coupled BESS, Applicant will be able to increase the Facility's capacity factor to up to approximately 35 to 40 percent. The additional solar arrays will increase the dc power production capacity to sustain a net ac output of up to 80 MW during daylight hours even when the sun is not at full strength. When solar insolation is not available, the BESS will be able to deliver up to 50 MW of power for four hours when fully charged, thereby increasing the capacity factor of the Facility and increasing its ability to provide reliable and/or timely service to the purchasing utility's customers.

III. Explanation of Capacity Information Included in Form 556

12. The capacity figures used in Applicant's Form 556, including relevant loads and losses, are set forth in the table below:

7a	Maximum gross power production capacity	82,548kWac
7b	Parasitic station power	1245kWac
7c	Electrical losses in interconnection transformers	800kWac
7d	Electric losses in AC/DC conversion equipment	0 kWac
7e	Other interconnection losses	503 kWac

7f	Total deductions from gross power production capacity	2,548kWac
7g	Maximum net power production capacity	80,000 kWac

13. Because there is little available guidance on how these figures should be presented in the case of combined solar/storage facilities, I provide the following explanations:

- Line 7a – Maximum gross power production capacity at the point of delivery:
as stated above, the Facility includes 160,000 kW dc of solar modules and 50,000 kW dc of energy storage, all behind 20 x 4127 kW ac unidirectional grid connected inverters. As described above, the solar inverter limits the amount of ac power that can be delivered to the point of interconnection, which is part of the Northwestern grid. Thus, the maximum gross ac power at the inverter ac terminals that the grid can see is 20 x 4127 kWac = 82,548 kW (the 4127 kW allows some of the 4200 kVA to be used for reactive support).
- Line 7b – Parasitic station power: all of the ac losses in the inverters are netted out before the inverter terminals; thus, parasitic station power is 0 kW. The substation electrical enclosure will on average use 45 kW and the average HVAC loads for BESS will be 1200 kW, which totals 1245 kW.
- Line 7c – Electrical losses in interconnection transformers: the “No Load Losses” (seen whenever the transformers are energized) are expected to be 133 kW. The load losses when the Facility is at full output (80 MW) are

expected to be 667 kW. Thus, the total transformer AC electrical losses are 800 kW

- Line 7d – Electric losses in AC/DC conversion equipment: the AC/DC conversion losses, based on the efficiency of the inverters, are 1,978 kW; however, these are netted out before getting to the inverter terminals and thus are included in the 20 x 4127 kWac above and are thus effectively 0 kWac for this calculation. Note that when there is more dc power available from the solar array than can be converted to ac power by the solar inverters, that dc power will be stored in the BESS. If there is more dc power from the solar array than can be converted to ac power or stored in the BESS, then the solar inverter will move off the “Maximum Power Point Tracking” point for the modules and the modules will produce less power – *i.e.*, the modules become less efficient as opposed to the solar inverter becoming less efficient (although there is some of each in reality).
- Line 7e – Other interconnection losses: this includes such things as the ac cables that connect the solar inverters to the project substation etc.

14. This concludes my affidavit.

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar LLC

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Docket No. QF17-454-__

Verification of Lloyd Baden Pasley

I, Lloyd Baden Pasley, am the witness identified in the foregoing affidavit. Pursuant to 18 C.F.R. § 385.2005(b)(3) (2018), I verify under penalty of perjury: (1) that I have read the foregoing affidavit; and (2) that the statements made therein with respect to Applicant and its Application are true and correct to the best of my knowledge, information and belief.



Lloyd Baden Pasley

Dated: September 10, 2019

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

COMBINED NOTICE OF FILINGS #1
(September 13, 2019)

Take notice that the Commission received the following electric corporate filings:

Docket Numbers: [EC19-130-000](#)
Applicants: GP Energy Management LLC, Power Supply Services LLC
Description: [Supplement to August 30, 2019 Application for Authorization Under Section 203 of the Federal Power Act of GP Energy Management LLC, et al.](#)

Filed Date: 9/12/19
Accession Number: [20190912-5127](#)
Comments Due: 5 pm ET 10/3/19

Docket Numbers: [EC19-135-000](#)
Applicants: Avangrid Renewables, LLC, Avangrid Arizona Renewables, LLC, Poseidon Wind, LLC
Description: [Errata to September 3, 2019 Application for Authorization Under Section 203 of the Federal Power Act \[Exhibit C\] of Avangrid Renewables, LLC, et al.](#)

Filed Date: 9/12/19
Accession Number: [20190912-5078](#)
Comments Due: 5 pm ET 9/24/19

Take notice that the Commission received the following electric rate filings:

Docket Numbers: [ER10-1276-010; ER10-1292-009; ER10-1287-009;](#)
[ER10-1303-009; ER10-1319-011; ER10-1353-011;](#)
[ER18-1183-002; ER18-1184-002](#)
Applicants: Consumers Energy Company, CMS Energy Resource Management Company, Grayling Generation Station Limited Partnership, Genesee Power Station Limited Partnership, CMS Generation Michigan Power, LLC, Dearborn Industrial

CNF091319

- 6 -

Description: [Application under Section 204 of the Federal Power Act for Authorization to Issue Securities, et al. of Interstate Power and Light Company under ES19-53. \(Replaces 20190913-5036\).](#)

Filed Date: 9/13/19

Accession Number: [20190913-5117](#)

Comments Due: 5 pm ET 10/4/19

Take notice that the Commission received the following qualifying facility filings:

Docket Numbers: [QF17-454-004](#)

Applicants: Broadview Solar LLC

Description: [Application for Certification of Broadview Solar LLC.](#)

Filed Date: 9/11/19

Accession Number: [20190911-5133](#)

Comments Due: 5 pm ET 10/2/19

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) on or before 5:00 pm Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: <http://www.ferc.gov/docs-filing/efiling/filing-req.pdf>. For other information, call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Nathaniel J. Davis, Sr.,
Deputy Secretary.

JA059

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar, LLC) Docket No. QF17-454-004

**MOTION TO INTERVENE AND PROTEST
OF THE EDISON ELECTRIC INSTITUTE**

Pursuant to Rules 211, 212, and 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“FERC” or “Commission”), 18 C.F.R. §§ 385.211, 385.212 and 385.214, and the Commission’s September 13, 2019 Combined Notice of Filing, the Edison Electric Institute (“EEI”), on behalf of its member companies, hereby respectfully submits this Motion to Intervene and Protest of Broadview Solar, LLC’s (“Broadview”) Application for Certification of Qualifying Small Power Production Facility (“SPP QF”) Status (“Application”).¹

In its Application, Broadview seeks SPP QF certification for a facility “comprised of a direct current (“dc”) coupled array of solar PV panels with a gross capacity of 160 MW(dc) and a four-hour 50 MW(dc) battery energy storage system (200 MWh) (“BESS”) that will be charged entirely from the solar array.”² EEI supports the use of energy storage and recognizes the benefits that energy storage provides to an electric system. Accordingly, EEI has been supportive of the Commission’s efforts to allow energy storage resources to participate in the wholesale markets on a comparable basis with other resources. The question in the instant case is not whether a battery storage facility or the installation of an additional 80 MW of solar capacity should be used to improve the dispatchability and output of an 80 MW solar resource,

¹ Broadview Solar, LLC, Application for Certification of Qualifying Small Power Production Facility Status (Sept. 11, 2019) (“Application”).

² *Id.* at 2.

but rather whether any combination of resources that exceeds the Congressionally-set 80 MW threshold requirement should be classified as a SPP QF under the Public Utility Regulatory Policies Act of 1978 (“PURPA”).³

As discussed herein, the Commission should not allow resource providers to artificially suppress the generation output from their facilities at a single location simply to qualify as a SPP QF. FERC should revise its interpretation of how power production capacity is determined under PURPA to better reflect Congressional intent. This change will help ensure that the intent of PURPA to encourage small power production is met while simultaneously limiting the ability of sophisticated developers to use Commission interpretations to meet PURPA’s size requirement for SPP QFs.

I. MOTION TO INTERVENE

Pursuant to Rule 214, 18 C.F.R. § 385.214, EEI submits the following in support of its Motion. EEI is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for about 220 million Americans and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States. Safe, reliable, affordable, and clean energy powers the economy and enhances the lives of all Americans. EEI’s diverse membership includes electric utilities that operate and serve customers in Montana, where Broadview is located.

In its Application, Broadview seeks certification as a SPP QF for a combined solar/storage facility that has a rated capacity of at least 210 MW. Broadview alleges that despite this combined total capacity, inverters will be used to limit the maximum gross output to

³ 16 U.S.C. § 796 (17)(A) (2012).

82.5 MW and that after deducting the power necessary to operate the facility and losses, the net power production placed on the system will be 80 MW. Like the *Beaver Creek* proceeding that was dismissed as moot earlier this year,⁴ this application raises an important issue regarding FERC’s interpretation of the “power production capacity” criteria for SPP QFs contained in PURPA. That interpretation has not been addressed by the Commission in close to forty years and the Commission has never addressed the interpretation of this term in the context of energy storage.

Section 210 of PURPA requires all electric utilities to purchase electricity at “avoided cost” from SPP QFs or qualifying co-generation facilities, referred to collectively as Qualifying Facilities, or QFs. As electric utilities, some EEI members are subject to PURPA’s mandatory purchase requirements from SPP QFs that meet the 80 MW power production capacity outlined in PURPA.⁵ As such, EEI’s members will be directly affected by any Commission decision in the instant docket.

EEI provides a broad-based perspective on the issue raised in the Application that cannot be adequately represented by any other party. EEI respectfully requests that the Commission grant this Motion to Intervene and allow EEI to become a party to the above-captioned proceedings.

II. NOTICES AND COMMUNICATIONS

All communications and correspondence with respect to this Motion should be served upon the following individual who should be included on the official service lists compiled by the Secretary of the Commission in these proceedings:

⁴ *Northwestern Corporation*, 168 FERC 61,049 (2019).

⁵ 16 U.S.C. § 824a-3 (2012).

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III. COMMENTS

Since PURPA was enacted and the Commission's rules implementing PURPA were developed, open access to transmission, greater competition among generators in organized spot and bilateral wholesale markets, improvements in technology, lower costs of technology, and implementation of state and federal policies have helped drive changes in the fuel mix as well as the increased use of new technologies. The Application raises an important question regarding whether the Commission's orders interpreting PURPA's measurement of the power production capacity of SPP QFs are still appropriate in light of industry changes that already have encouraged the usage of renewable technologies, to a far greater degree than PURPA.

PURPA defines an SPP QF as "a facility which is an eligible solar, wind, waste, or geothermal facility, or a facility which (i) produces electric energy solely by the use, as a primary energy source, of biomass, waste, renewable resources, geothermal resources, or any combination thereof; and (ii) has a power production capacity, which, together with any other facilities located at the same site is not greater than 80 megawatts."⁶ In *Occidental Geothermal, Inc.*, while recognizing that "[t]he Conference Report accompanying PURPA indicate[d] that the power production capacity of the facility is its 'rated capacity,'"⁷ the Commission stated that it

⁶ 16 U.S.C. § 796(17)(A) (2012).

⁷ *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231 at 61,444 (1981) ("Occidental").

will consider the “power production capacity” of a facility to be the maximum net output of the facility which can be safely and reliably achieved under the most favorable operating conditions likely to occur over a period of several years. The net output of the facility is its send out after subtraction of the power used to operate auxiliary equipment in the facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and excitors) and for other essential electricity uses in the facility from the gross generator output.⁸

This interpretation of power production capacity is reflected in Form 556, which applicants fill out as part of the self-certification process but is not otherwise codified in Commission rules or regulations.⁹ Broadview relies on this 1981 decision to support the position that artificially limiting the output of its facility to 82.5 MW and then relying on the net output calculation to meet the 80 MW threshold, qualifies its facility to be classified as a SPP QF.

Broadview’s facility does not meet the size requirement specified in PURPA, as the power production capacity of all the facilities located at its site is greater than 80 MW. PURPA specifically established an 80 MW threshold for SPP QFs and resource developers should not be able to artificially limit the output of their facilities to meet this definitional requirement. As an initial matter, Broadview should not be considered to satisfy the Commission’s net output precedent articulated in *Occidental* which involved normal operations of a 80 MW facility. In this case, Broadview’s application presents an instance where the developer proposes to use the project’s configuration of its invertors to artificially suppress the maximum output of the plant on to the grid solely for QF-qualification purposes. And while Broadview argues that *Occidental* supports a QF being able to artificially limit the output of its facility,¹⁰ it bears emphasizing that

⁸ *Occidental* at 61,445.

⁹ Form 556 at p 1, 9. <https://www.ferc.gov/docs-filing/forms/form-556/form-556.pdf>.

¹⁰ Application at 4.

the issue of renewable generation coupled with batteries was not before the Commission in that case.¹¹

At the September 19, 2019 open meeting, Commissioner McNamee indicated that “Congress enacted PURPA in 1978 to promote electric competition, conserve natural gas, encourage the use of renewable resources, and provide opportunities for cogeneration facilities.” Allowing the sort of gaming proposed by Broadview does not encourage competition or encourage the use of renewable resources. Instead, it restricts competition by eliminating or reducing opportunities for non-PURPA renewables and other carbon-free generation to compete and encourages resources to artificially limit their power production which is counter to the goals of PURPA to increase renewable generation. Thus, Broadview’s Application raises the threshold question of whether the “net output” test is still applicable or appropriate for determining power production capacity, especially in this context of generation coupled with storage.

With the growth of new technologies, including storage, and increased sophistication of resources, the Commission should evaluate whether it is still appropriate to use *Occidental*’s net output test rather than the rated capacity test initially intended by Congress. Under a rated capacity test, the Commission would look only at the rated capacity of all the devices that can send power to the grid at the location and ignore the use of artificial devices that prevent the rated capacity from ultimately reaching the electric utility’s system. Since the initial guidance was provided in a SPP QF certification proceeding and is not codified in Commission regulations, the Commission can make this change in the instant proceeding. A rulemaking is not needed to revisit the 80 MW power production capacity measurement policy, as the relevant

¹¹ This raises a number of questions such as, for example, whether the facility would be generating more than 80 MW at any given time and storing for later use so that as a whole the project would be generating more than 80 MW.

regulation (18 C.F.R. § 292.204(a)) limits the capacity of the facilities at any one location to 80 MW and says *nothing* about how the 80 MW should be measured at any single location.

As noted, this case is not about the use of storage or storage paired with renewables. In *Luz Development and Finance Corporation*, the Commission indicated that a battery storage system does not independently meet the definition of a primary energy source and that “it is necessary to look to the source of [the battery’s] energy as the ultimate primary energy source of the facility.”¹² Under *Luz*, a battery can be part of a SPP QF as long as the total fuel mix of the facilities meets the requirements of FERC’s regulations for SPP QFs. EEI is not challenging this precedent here. What EEI is challenging is whether the pairing of batteries (or any other storage devices) and renewable facilities all located on a single site should be permitted to qualify as an SPP QF if the rated capacity of all the devices combined is above 80 MW. The answer, as Congress intended, should be “No”. Whether two 80 MW solar arrays should be permitted to be paired with an 80 MW constraining device, also should be answered in the negative.

IV. CONCLUSION

EEI appreciates the opportunity to comment on this important issue and urges the Commission to grant the relief requested herein.

Respectfully Submitted,

/s/ Lopa Parikh

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¹² *Luz Development and Finance Corporation*, 51 FERC ¶ 61,078 (1990).

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 2nd day of October 2019.

/s/ Lopa Parikh

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**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar LLC)
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QF17-454-004

**MOTION TO INTERVENE AND PROTEST OF
NORTHWESTERN CORPORATION**

Pursuant to sections 211 and 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“FERC” or “Commission”), 18 C.F.R. §§ 385.211, 385.214 (2019), NorthWestern Corporation d/b/a NorthWestern Energy (“NorthWestern Energy”), hereby moves to intervene and protest the September 11, 2019 Application for Certification as a qualifying small power production facility (“QF”) filed in the above-captioned proceedings by Broadview Solar LLC (“Broadview”).¹ As discussed further herein, Broadview has not justified its proposal to treat separate small power production facilities as a single QF, and the Commission accordingly should deny Broadview’s Application.

I. BACKGROUND

A. NorthWestern Energy

NorthWestern Energy is a public utility engaged in the generation, transmission, and distribution of electricity and the supply and transportation of natural gas. Its facilities are located primarily in Montana and South Dakota. In South Dakota, NorthWestern Energy is a transmission owner within the Southwest Power Pool, Inc. (“SPP”), and has transferred functional control of a large portion of its electric transmission facilities in that jurisdiction to SPP. In Montana, NorthWestern Energy is a transmission owner/operator and Balancing Authority within the

¹ Broadview Solar LLC, Application for Certification of Qualifying Small Power Production Facility Status, Docket No. QF17-454-004 (Sept. 11, 2019) (“Application”).

Western Electricity Coordinating Council. NorthWestern Energy's Montana and South Dakota transmission facilities are not physically connected and are not in the same electric reliability region.

B. Broadview

Broadview proposes to develop new generation facilities in Yellowstone County, Montana. The facilities would consist of two basic power producing components: (i) a direct current coupled array of solar PV panels with a gross capacity of 160 MW; and (ii) a four-hour 50 MW battery energy storage system (“BESS”).² Broadview intends to charge the BESS exclusively with energy from the array of solar panels.³ Broadview avers that the combined output of both components will not exceed 80 MW at the point of interconnection due to the installation of twenty (20) 4.127 MW inverters that convert the direct current (“dc”) output of the solar panels to alternating current (“ac”), and that limit combined maximum gross output to 80 MW, after the deduction of auxiliary loads and losses.⁴ Broadview requests that the Commission certify both power producing components as a single small power production QF. Broadview intends to deliver the output of the facility to NorthWestern Energy.⁵

C. PURPA and the 80 MW Size Limit

As the Commission has explained, the Public Utility Regulatory Policies Act (“PURPA”) was enacted in 1978 as part of a package of legislative proposals intended to reduce the country’s dependence on oil and natural gas, which at the time were in short supply and subject to dramatic

² Application at 2-3.

³ *Id.* at 2.

⁴ *Id.* 2, 5.

⁵ 16 U.S.C. 796(17)-(18), 824a-3.

price increases.”⁶ “PURPA sets forth a framework to encourage the development of alternative generation resources that do not rely on fossil fuels and cogeneration facilities that make more efficient use of the heat produced from the fossil fuels that were then commonly used in the production of electricity.”⁷ PURPA does this by, among other things, requiring utilities to buy energy and capacity from eligible “small power production facilities,” which are certified as QFs.

In terms of the eligibility for QF status, the Federal Power Act (“FPA”), as amended by PURPA, defines a small power production facility as a facility that “has a power production capacity which, together with any other facilities located at the same site (as determined by the Commission), is not greater than 80 megawatts.”⁸ Because the 80 MW size limit on small power production facilities is a statutory requirement, the Commission cannot certify a small power production facility as a QF if its power production capacity exceeds 80 MW. The Commission cannot waive this requirement and is obligated under PURPA to limit QF status to facilities that satisfy the requirement.⁹

The Commission’s regulations implementing PURPA carry forward the statutory size limitation on small power production facilities. Section 292.204(a) of the Commission’s regulations states that “the maximum size of a qualifying small power production facility is 80 MW, including the capacity of any other small power production facilities that use the same

⁶ *Qualifying Facility Rates and Requirements; Implementation Issues Under the Public Utility Regulatory Policies Act of 1978*, Notice of Proposed Rulemaking, 168 FERC ¶ 61,184 at P 2 (2019).

⁷ *Id.*

⁸ 16 U.S.C. § 796(17)(E).

⁹ See *Small Power Production and Cogeneration Facilities — Qualifying Status*, Final Rule, Order No. 70, FERC Stats. & Regs. ¶ 30,134 (1980).

energy resource, are owned by the same person(s) or its affiliates, and are located at the same site.”¹⁰

Pursuant to section 292.204(a)(2)(i) facilities are considered to be located at the same site as the facility for which qualification is sought if they are located within one mile of the facility for which qualification is sought. FERC’s “one-mile” rule is a bright line test.¹¹ While the Commission can waive its one-mile rule to allow the facilities to be located within one mile of each other, the Commission cannot waive the underlying statutory ‘same site’ limitation.”¹²

To calculate the rated capacity of a small power production facility for purposes of the 80 MW size limit, the Commission starts with the gross capacity of the facility. The Commission does not limit its inquiry only to the nominal rating of the facility depending upon the circumstances, but considers the effects other factors — such as ambient temperature, fuel heat content, and system load changes — may have on the rating. The Commission considers the maximum net output of the facility which can be safely and reliably achieved under the most favorable operating conditions.¹³ In *Occidental Geothermal, Inc.*, the Commission explained how “net output” would be determined:

The net output of the facility is its send out after subtraction of the power used to operate auxiliary equipment in the facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and excitors) and for other essential electricity uses in the facility from the gross generator output.¹⁴

¹⁰ 18 C.F.R 292.204(a) (2018).

¹¹ *Northern Laramie Range Alliance*, 138 FERC ¶ 61,171 (2012); *De Wind Novus, LLC*, 139 FERC ¶ 61,210 (2012).

¹² *Pinellas County, Florida*, 50 FERC ¶ 61,269 (1990).

¹³ *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231 at 61,445 (1981).

¹⁴ *Id.*

Finally, for purposes of calculating the capacity of a small power production facility, the facility's capacity rating is the determinative factor, as opposed to an average production.¹⁵ The legislative history of PURPA unambiguously states that the "power production capacity of the facility means the rated capacity of the facility."¹⁶ The Commission must "adhere to congressional mandates and intent set forth in the statutes [it] is charged with enforcing."¹⁷ Moreover, the Commission must enforce its regulations under PURPA in a manner that "give[s] effect to the unambiguously expressed intent of Congress."¹⁸

III. MOTION FOR LEAVE TO INTERVENE

Broadview states that its facility under development in Yellowstone County, Montana, will interconnect to the transmission system owned and operated by NorthWestern Energy.¹⁹ As a public utility transmission provider and intended host utility of Broadview's facility, NorthWestern Energy will be directly affected by the Application. As a result, NorthWestern Energy has a substantial interest in this proceeding that cannot be represented by any other party, and its participation in is in the public interest. NorthWestern Energy's motion to intervene accordingly should be granted.

¹⁵ *Massachusetts Refusetech, Inc.*, 25 FERC ¶ 61,406 at 61,913 (1983) (explaining that "average production is not synonymous with production capacity.").

¹⁶ Joint Explanatory Statement of the Committee of Conference, H.R. Conf. Rep. 95-1750 at p. 89, 95th Cong., 2d. Sess., 98 (1978).

¹⁷ *BP Pipelines (Alaska) Inc.*, 149 FERC ¶ 61,149 at 61,972 n. 20 (2014).

¹⁸ See, e.g., *W. Minn. Mun. Power Agency v. FERC*, 806 F.3d 588, 591 (D.C. Cir. 2015) (citing *Chevron U.S.A., Inc. v. NRDC*, 467 U.S. 837, 842-843 (1984)).

¹⁹ Application at 1.

IV. PROTEST

Broadview's calculation of the maximum ratings of its facilities under PURPA does not comply with the Commission's rules and precedent. Broadview's small power production facilities significantly exceed the 80 MW threshold upon QFs, which is a statutory requirement, and Broadview does not provide any justification for its proposal.

A. The Capacity of Each of Broadview's Small Power Production Facilities Must Be Calculated Separately

The flaw in Broadview's analysis begins with Broadview's characterization of its planned generation facilities as a single "Facility" limited by the inverters.²⁰ In fact, Broadview is developing separate small power production facilities at the same site. First, as described in its Application, Broadview is developing an array of solar panels with a gross capacity of 160 MW, which are connected to twenty (20) 4.127 MW inverters that convert the direct current ("dc") output of the solar panels to alternating current ("ac").²¹ Solar generation facilities are recognized under Commission policy as a type of renewable energy resource that are eligible small power production facilities provided they do not exceed 80 MW in size.²² If the maximum output of Broadview's 160 MW solar panels is limited by the inverters, as contended by Broadview, the output of the solar small power production facility, after subtraction of losses and auxiliary loads, already reaches 80 MW.

The second small power production facility is the BESS, which would be capable of producing up to 50 MW for four hours. The BESS is separate from the solar panels. The BESS would be connected to Broadview's solar panels through dc-to-dc voltage inverters that are

²⁰ See, e.g., *id.* ("The Facility will have a maximum net power production capacity of 80 MW and will use solar energy as its primary energy source.").

²¹ See *id.* at 2-3.

²² *Small Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of the Public Utility Regulatory Policies Act of 1978*, Order No. 69, 45 Fed. Reg. 12214, 12215 (Feb. 25, 1980).

different from the dc-to-ac inverters that suppress the deliveries from the solar panels to the point of interconnection.²³ Broadview intends to deliver part of the output from the 160 MW gross capacity in solar panels to charge the BESS — at times delivering the amounts in excess of 80 MW that is produced by the solar panels to the BESS instead of to the point of interconnection.²⁴ The production of the solar facilities and the BESS will be staggered such that Broadview will deliver energy from the BESS when the solar facilities are producing less than 80 MW.²⁵ Broadview will use the BESS to produce energy that it will send to NorthWestern Energy.

In *Luz Development and Finance Corp.*, the Commission found that a battery storage facility is an eligible renewable resource for purposes of QF certification, provided that the energy input to the facility is itself biomass, waste, a renewable resource, a geothermal resource, or meets the applicable limits for use of fossil fuel.²⁶ The Commission found that the legislative history of PURPA indicated that Congress intended electric energy storage systems to be small power production facilities.²⁷ Thus, the Commission held in *Luz* that “energy storage facilities such as the proposed Luz battery system are a renewable resource for purposes of QF certification,”²⁸ and that “energy storage facilities are subject to the same fuel use limitations as all other small power production facilities.”²⁹ Broadview avers that the BESS will be charged exclusively by energy delivered from the solar panels, and accordingly the BESS will be eligible small power production facilities.³⁰

²³ See Application, Affidavit of Lloyd Baden Pasley (“Pasley Affidavit”) at ¶ 7.

²⁴ Pasley Affidavit at ¶ 13.

²⁵ *Id.* at ¶ 5.

²⁶ 51 FERC ¶ 61,078 (1990).

²⁷ *Id.* at 61,171 (discussing S. Conf. Rep. No. 1292, 95th Cong. 2d Sess. 89 (1978)).

²⁸ *Id.* at 61,172.

²⁹ *Id.* at 61,170.

³⁰ Application at 5.

For purposes of assessing compliance with the one mile rule, the separate capacities of both the solar small power production facilities and the battery small power production facilities must be aggregated. Section 292.204(a) states that “the power production capacity of a facility for which qualification is sought, *together with the power production capacity* of any other small power production facilities that use the same energy resources, are owned by the same person(s) or its affiliates, and are located at the same site may not exceed 80 MW.”³¹ The Commission explained this provision in *Northern Laramie Range Alliance*, where it stated “The maximum size of a qualifying small power production facility, as provided for in section 292.204(a)(1) is 80 MW, including the capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site.”³²

Thus, under its plain meaning of section 292.204(a) as well as Commission precedent, this rule means that the capacity of each small power production facility owned by the same person that uses the same energy resources and is located at the same site must be calculated separately prior to combining them to assess the total size.³³ Thus, assuming the output of the solar small power production facilities is limited by the inverters, the 80 MW net output of the solar small power production facilities must be added together with the 50 MW net output of the BESS small power production facilities. Therefore, the total capacity of Broadview’s small power production

³¹ 18 C.F.R. § 292.204(a)(1).

³² *Northern Laramie Range Alliance*, et al., 138 FERC ¶ 61,171 at 61,732-33 (2012).

³³ See *id.*; See also *Brady Power Partners*, 61 FERC ¶ 62,113 (1992) (discussing the facility’s “net capacity, in conjunction with the net capacity of any other facilities owned by the same person and located at the same site”); *Dixie Valley, L.P.*, et al., 68 FERC ¶ 62,073 (1994) (same); *Cambria CoGen Co.*, 63 FERC ¶ 62,169 (1993); *Northampton Generating Co., LP.*, 64 FERC ¶ 62,166 (1993); *Rye Patch Limited Partnership*, 64 FERC ¶ 62,017 (1993); *Coso Finance Partners (Navy I Facility)*, 65 FERC ¶ 62,170 (1993); *Coso Finance Partners (Navy II Facility)*, 65 FERC ¶ 62,161 (1993); *Coso Energy Developers (BLM Facility)*, 65 FERC ¶ 62,190 (1993); *Union Pacific Energy Co.*, 63 FERC ¶ 62,323 (1993); *Waste Conversion Systems of Georgia, Inc.*, 63 FERC ¶ 62,314 (1993).

facilities is 130 MW, not 80 MW as claimed by Broadview. As such, Broadview's facilities exceed the 80 MW size limitation of PURPA, and cannot be certified as QFs.

In support of its approach, Broadview references *Connecticut Valley Elec. Co., Inc.*, arguing that the Commission found in that case that a "facility's capacity is the maximum net output that the facility can safely and reliably achieve at the point of interconnection."³⁴ In that case, the Commission considered, among other issues, whether a QF may sell in excess of its net output. In the course of reaching the conclusion that a QF may not sell in excess of its net output, the Commission stated that "[t]he certified capacity of a QF, i.e., its net capacity, is the maximum net output that the facility can safely and reliably achieve at the point of interconnection under the most favorable operating conditions likely to occur over a period of several years."³⁵ However, *Connecticut Valley Elec. Co.* does not support Broadview, as the case does not involve the combination of multiple small power production facilities as a single facility nor does it overrule or otherwise support a reading of section 292.204(a)(1) that is contrary to the plain terms of that regulation. The case does not hold that multiple small power production facilities may be treated as a single small power production facility if their net output does not exceed 80 MW. To be clear, it is not NorthWestern Energy's position that the "net output" rule is inapplicable; rather, the "net output" rule must be applied to each of the small power production facilities at Broadview's site separately and then aggregated to determine if the 80 MW limit has been satisfied.

³⁴ Application at 3 (citing *Connecticut Valley Elec. Co., Inc. v. Wheelabrator Claremont Co., L.P.*, 82 FERC ¶ 61,116 at 61,421 n. 25 (1988)).

³⁵ *Connecticut Valley Elec. Co., Inc.*, 82 FERC at 61,421 n. 25 (1988).

B. Broadview Provides No Justification for Its Proposal to Treat Two Small Power Production Facilities as One.

Broadview does not provide any legitimate justification for treating the solar small power production facilities and battery small power production facilities as a single facility. Broadview claims that following the letter of the regulations at section 292.204(a)(1) would “artificially inflate” the aggregate capacity of the “Facility components” at the “point of delivery.”³⁶ As discussed above, however, the solar small power production facilities and the BESS are separate small power production facilities and their net capacities must be individually calculated before aggregating them. Furthermore, in *Northern Laramie Range Alliance*, which involved the issue of whether two separate wind facilities should be treated as a single QF, the Commission rejected the notion that small power production facilities should be viewed as a single facility if they use the same line to deliver energy from their facilities to a single point on the transmission system.³⁷ Thus, pursuant to the holding of *Northern Laramie Range Alliance*, the fact that both of Broadview’s small power production facilities will deliver their output to the same “point of delivery” does not make them a single QF.

The logic of Broadview’s proposal — to treat the BESS as a sort of auxiliary equipment to the solar small power production facilities, rather than as a separate small power production facility — is inconsistent with the Commission policies in many respects. First and foremost, Broadview’s proposal is inconsistent with *Luz Development and Finance Corporation*, where the Commission found that “energy storage facilities [. . .] are a renewable resource for purposes of QF

³⁶ Application at 6.

³⁷ *Northern Laramie Wind Range Alliance, et al.*, 138 FERC ¶ 61,171 at PP 15-16 (2012).

certification.”³⁸ Broadview does not reconcile its proposal with *Luz Development and Finance Corporation*.

Further, if a battery storage facility were determined to not be an independent producer of power just because it staggers its production with the output of another generation facility, this would have far-reaching impacts. For example, when battery storage facilities are used for generation services, as Broadview proposes to use the BESS, the Commission recognizes that battery storage facilities are power-delivering facilities that have a capacity independent of the resources that “charge” them. Wholesale sales of energy delivered from storage facilities are subject to the Commission’s jurisdiction, and, furthermore, sales to a storage facility for redelivery to the transmission grid are considered jurisdictional wholesale sales.³⁹ Requests for authorization to make market-based rate sales from a battery storage facility are evaluated based upon the nameplate capacity of the battery storage facility.⁴⁰ The Commission has promulgated new rules to ensure that battery storage facilities providing generation services in ISO and RTO organized markets are treated comparably to other resources, including eligibility for the same energy prices other resources receive.⁴¹ The Commission has also amended the *pro forma* Large Generator Interconnection Agreement and Large Generator Interconnection Procedures to add electric

³⁸ *Id.* at 61,172.

³⁹ See *Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 841-A, 167 FERC ¶ 61,154 at P 49 (2019).

⁴⁰ See, e.g., *Joliet Battery Storage LLC, et al.*, 152 FERC ¶ 61,117 (2015); see also *Iron Horse Battery Storage, LLC*, unpublished letter order, Docket No. ER17-987-000 (Mar. 22, 2017); *McHenry Battery Storage, LLC*, unpublished letter order, Docket No. ER16-2226-001 (Oct. 7, 2016); *Clinton Battery Utility, LLC*, unpublished letter order, Docket No. ER16-2194-000 (Aug. 12, 2016); *Willey Battery Utility, LLC*, unpublished letter order, Docket No. ER15-2380-000 (Sept. 30, 2015); *Battery Utility of Ohio, LLC*, unpublished letter order, Docket No. ER13-1667-000 (Jul. 19, 2013); *AES ES Westover, LLC*, unpublished letter order, Docket Nos. ER10-712-000 and ER10-712-001 (Apr. 23, 2010).

⁴¹ *Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 841, Final Rule, 162 FERC ¶ 61,127 (2018).

storage facilities to the definition of “Generating Facility.”⁴² And, owners of battery storage facilities making wholesale sales can also be Exempt Wholesale Generators (“EWG”) under the Public Utilities Holding Company Act of 2005 because battery storage facilities are “eligible facilities”⁴³ – which are physical facilities that actually generate electricity, not facilities that are ancillary or secondary to the generation process.

Based upon the facts set forth in the Application, Broadview’s request for QF certification must be denied. The 80 MW threshold that separates “small” power production facilities eligible to be QFs from other kinds of generators is a statutory requirement of the Federal Power Act (“FPA”) and PURPA. The Commission has found that “it is constrained to implement Congress’ decision, embodied early in the FPA, to limit to 80 MW the power production capacity of small power production facilities at the same site.”⁴⁴ Accordingly, the Commission should implement Congress’ decision in this case and deny Broadview’s Application.

C. The Other Precedent Cited by Broadview is Not Applicable.

Broadview’s reliance on *Occidental Geothermal, Inc.*,⁴⁵ is misplaced. Broadview asserts that the Commission’s decision in that case indicates that the individual components of the facility

⁴² *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, Final Rule, 163 FERC ¶ 61,043 at P 275 (2018).

⁴³ See *AES ES Westover, LLC*, 131 FERC ¶ 61,008, at PP 2, 7 (2010) (finding that an energy storage unit used for wholesale sales including ancillary services qualified as an “Eligible Facility” and its owner an EWG); see also *AES Laurel Mountain, LLC*, Docket No. EG11-10-000, “Notice of Self-Certification as an Exempt Wholesale Generator” (Nov. 9, 2010) and “Notice of Effectiveness of Exempt Wholesale Generator Status” (Feb. 14, 2011) (EWG status granted to a company owning energy storage facilities for wholesale power and ancillary service sales); *Grand Ridge Energy IV LLC*, Docket No. EG13-10-000, “Notice of Self-Certification of Exempt Wholesale Generator Status” (Nov. 13, 2012) and “Notice of Effectiveness of Exempt Wholesale Generator Status” (Feb. 8, 2013) (EWG status granted to a company owning energy storage facilities for wholesale power and ancillary service sales).

⁴⁴ *Pinellas County, Florida*, 50 FERC ¶ 61,269 at 61,855 (1990).

⁴⁵ 17 FERC ¶ 61,231.

are irrelevant to the calculation of “net output” in accordance with *Occidental*.^{46, 47} Broadview argues that only what the facility is able to actually send to the electric grid, which cannot exceed 80 MW, is the relevant question for determination as a QF.⁴⁸ However, the Commission’s holding in *Occidental* does not provide that the individual components of the QF are irrelevant or that placing restrictions on a facility’s output to no more than 80 MW qualifies it as a QF. In that case, the Commission simply held that if a facility has the potential to output more than 80 MW for limited periods of time due to circumstances outside of the facility’s control, the facility can still qualify as a QF.⁴⁹ Additionally, in that case, the facility at issue did not involve an inverter for a solar photovoltaic system, but instead used “geothermal stream as its primary energy source.”⁵⁰ Thus, *Occidental Geothermal* does not support Broadview’s novel argument that the decision permits a 160 MW solar facility with a 50 MW battery to qualify as a QF.

III. CONCLUSION

For the foregoing reasons, NorthWestern requests that the Commission accept this Protest and grant NorthWestern’s Motion to Intervention.

Respectfully submitted,

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⁴⁶ Application at 3.

⁴⁷ Interestingly, Broadview contradicts itself when it relies on an inverter to limit the output of the facility whereby it has focused on a single component of the facility.

⁴⁸ *Id.*, at 4.

⁴⁹ *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231 at 61,445

⁵⁰ *Id.* at 61,444

CERTIFICATE OF SERVICE

Pursuant to Rule 2010 of the Commission's Rules of Practice and Procedure, I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated this 2nd day of October 2019.

/s/ Dori Quam

Dori Quam

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**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar LLC

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Docket No. QF17-454-004

**MOTION FOR LEAVE TO ANSWER AND
ANSWER OF BROADVIEW SOLAR LLC**

Pursuant to Rules 212 and 213 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“FERC” or the “Commission”),¹ Broadview Solar LLC (“Broadview”) submits this motion for leave to answer and answer to the Motions to Intervene and Protests filed in the above-captioned proceeding on behalf of the Edison Electric Institute (“EEI”) and NorthWestern Corporation d/b/a NorthWestern Energy (“NorthWestern”).²

The motions to intervene and protests are in response to an application filed by Broadview on September 11, 2019 (“Application”), in which Broadview seeks certification of a direct current (“dc”) coupled solar photovoltaic (“Solar PV Arrays”) and battery energy storage system (“BESS”) under development in Yellowstone County, Montana (the “Facility”) as a qualifying small power production facility (“QF”) within the meaning of the Public Utility Regulatory Policies Act of 1978, as amended (“PURPA”). As shown in the Application, energy from the dc-coupled Facility must pass through 20 x 4.2 MVA dc to alternating current (“ac”) inverters before sending any energy out to the interconnecting transmission system owned and operated by NorthWestern. The Facility’s power production capacity is, therefore, physically

¹ 18 C.F.R. §§ 385.212, 385.213 (2019).

² Edison Elec. Inst., *Motion to Intervene and Protest*, Docket No. QF17-454-004 (filed Oct. 2, 2019) (“EEI Protest”); Nw. Corp., *Motion to Intervene and Protest*, Docket No. QF17-454-004 (filed Oct. 2, 2019) (“NorthWestern Protest”).

limited by its inverters such that the Facility cannot send out more than 80 MW to the NorthWestern transmission system.

In their protests, EEI and NorthWestern argue that the Commission should not certify the Facility as a QF because, they reason, it should be deemed one or more projects, with an aggregate power production capacity exceeding 80 MW. Northwestern argues that the Facility should be measured as one 80 MW project consisting of the Solar PV Arrays and a separate 50 MW project consisting of the BESS, and that each should be deemed to be 130 MW in accordance with aggregation rule set forth in Section 292.204(a) of the Commission's regulations.³ In contrast, EEI argues that the power production capacity of the Facility should be measured as its "rated capacity," which EEI states should be 210 MW based on the combined nameplate capacities of the Solar PV Arrays and the BESS. NorthWestern and EEI are both wrong. As addressed further below, the Facility will be an integrated hybrid QF project, with a single interconnection point, correctly measured by its net output to the grid, which can only be 80 MW based on the physical limitations of the Facility's inverters and Broadview's obligations under its Standard Large Generator Interconnection Agreement ("LGIA") with NorthWestern.⁴ Accordingly, the Commission should approve Broadview's application for certification of the Facility as a QF.

³ 18 C.F.R. 292.204(a).

⁴ The Facility will interconnect with the NorthWestern transmission system pursuant to the LGIA, dated May 1, 2019. The body of the LGIA conforms to the pro forma set forth in Attachment M to NorthWestern's open access transmission tariff, which has been accepted by the Commission. *See Nw. Corp.*, Docket Nos. ER19-183-000, *et al.* (2018) (unpublished letter order accepting current pro forma LGIA). Appendix C of this LGIA identifies the Facility as being comprised of the solar PV arrays and the BESS with a combined net capacity not to exceed 80 MW. If Broadview intended to increase the net capacity of the Facility above 80 MW, it would need to submit a request for modification under the LGIA. That Broadview has an obligation under its LGIA to not exceed 80 MW at the point of interconnection confirms Broadview's characterization of the Facility as having a net capacity of 80 MW.

I. MOTION FOR LEAVE TO ANSWER

The Commission's Rules of Practice and Procedure generally do not permit answers to protests.⁵ However, the Commission can waive this prohibition for good cause.⁶ Good cause exists when the answer ensures a complete record in the proceeding,⁷ provides information that is helpful to the disposition of an issue,⁸ or otherwise aids the Commission in its understanding and resolution of issues.⁹ Broadview submits that its Answer achieves each of these goals. Accordingly, Broadview respectfully requests that the Commission grant its motion for leave to answer.

II. ANSWER TO NORTHWESTERN PROTEST

In its protest, NorthWestern artificially characterizes the Facility as being two entirely separate, standalone projects,¹⁰ with the Solar PV Arrays having a net output of 80 MW and the BESS having a net output 50 MW for four hours.¹¹ On this basis, NorthWestern argues that the total power production capacity of the Facility should be deemed 130 MW, not 80 MW as set forth in the Application.

NorthWestern's argument lacks merit.

First, the Solar PV Arrays and the BESS will, necessarily, operate as a single, integrated hybrid facility—the Facility—which will be developed, owned, and operated by a single project company, and will interconnect to the NorthWestern transmission system at one interconnection point, pursuant to a single interconnection agreement.

⁵ 18 C.F.R. § 385.213(a)(2).

⁶ *Id.* § 385.101(e).

⁷ See, e.g., *Pac. Interstate Transmission Co.*, 85 FERC ¶ 61,378, at 62,444 (1998), *reh'g denied*, 89 FERC ¶ 61,246 (1999).

⁸ See, e.g., *CNG Transmission Corp.*, 89 FERC ¶ 61,100, at 61,287 n.11 (1999).

⁹ See, e.g., *Tenn. Gas Pipeline Co.*, 92 FERC ¶ 61,009, at 61,016 (2000).

¹⁰ See NorthWestern Protest at 6-9.

¹¹ *Id.* at 8.

Second, under Broadview's LGIA with NorthWestern, the Facility is not permitted to send out more than 80 MW(ac) at the Facility's point of interconnection. Appendix C to the LGIA provides a description of the Facility, including the Solar PV Arrays, the BESS, and the inverters, and states that the Facility's total size will be 80 MW. Moreover, the interconnection facilities that are described in Appendix A of the LGIA are based on studies reflecting a net output of 80 MW. Indeed, NorthWestern's own interconnection queue correctly states that the Facility will consist of solar and battery components with a maximum output of 80 MW.¹² In addition, under Section 9.4 of the LGIA, Broadview has an obligation to operate the Facility in accordance with the interconnection details set forth in Appendix C, which states that total size will be Project will be 80 MW based on the max output of the inverters. If Broadview delivered in excess of 80 MW to the point of interconnection, it would be in breach of its obligations under the LGIA.

Third, any power generated by the Solar PV Arrays or discharged from the BESS must be converted by inverters from dc to ac power before being sent out for injection into the ac transmission grid. As stated in the Form 556 set forth in Attachment A to the Application, and in the affidavit of Lloyd Pasley set forth in Attachment B to the Application ("Pasley Affidavit"), the Solar PV Arrays and the BESS will be attached at their terminals to the Facility's specially designed inverters, which will physically limit the maximum gross output of the Facility to approximately 82.5 MW(ac). After deducting Facility loads and losses, the maximum net power production of the Facility, as measured at the point of interconnection, will be 80 MW(ac). This is true even if the Solar PV Arrays and the BESS are deemed to be two, separate, standalone

¹² See Nw. Corp., *Interconnection Queue*, available at: <http://www.oatioasis.com/NWMT/NWMTdocs/GenConnect6.html> (last visited October 16, 2019) (including a description of the Facility as "Project Number 309 – Broadview Solar 1").

projects. Because the Facility's inverters and interconnection facilities ensure that delivery at the point of interconnection cannot exceed 80 MW, it is necessarily the case that the net capacity of the Solar PV Array is 80 MW minus any simultaneous export to the grid by the BESS.

Similarly, the net capacity of the BESS is 50 MW minus any simultaneous export to the grid by the Solar PV Array. Thus, just by way of example, if the Solar PV Array achieves a generating capacity of 60 MW in any hour, the inverters would allow a maximum of 20 MW of capacity from the BESS to be sent out during the same time period. Exceeding the 80 MW (net) limitation is not possible given the physical limitations of the inverters and the Facility's interconnection facilities.¹³ Indeed, Broadview will be unable to use the solar inverters to convert additional power from the Facility and remain within the manufacturer's warranty.¹⁴ Accordingly, even if the Commission were to determine that the Solar PV Arrays and the BESS should be treated as separate QFs, the Commission should nevertheless recognize that at no time could the aggregate capacity of the two projects exceed the capacity of the inverters.

Finally, the Facility includes components that exceed 80 MW solely to maximize the Facility's capacity factor and to be able to produce during non-daylight hours, which mitigates reliability concerns inherent with integration of solar projects. As stated in the Pasley Affidavit, a typical solar project has a capacity factor of approximately 25 to 30 percent.¹⁵ By increasing the dc capacity of the Solar PV Arrays and adding the dc-coupled BESS, Broadview will be able to increase the Facility's capacity factor to up to approximately 35 to 40 percent. In this way, the BESS serves to enhance the capacity factor of the integrated Solar PV Arrays, and does not act

¹³ If the solar PV panels and BESS were each owned by affiliate project companies and located within one mile of each other, each with its own inverters and interconnection arrangements such that the solar array could expect 80 MW and the BESS could export 50 MW simultaneously, the one-mile rule would aggregate their individual capacity to be 130 MW. However, that is not the case presented. The physical limitations of the Facility's inverters and interconnection facilities limit the simultaneous output of the hybrid Facility to 80 MW.

¹⁴ See Pasley Affidavit at 4.

¹⁵ *Id.* at 5.

as a separate project. This is consistent with Commission precedent which establishes that a small power production facility’s capacity is the maximum net output that the facility can safely and reliably achieve at the point of interconnection.¹⁶ Critically, of course, the Facility’s components that exceed 80 MW for reliability reasons only exist behind the inverters, so they have no impact on the Facility’s maximum net output of 80 MW.

III. ANSWER TO EEI PROTEST

In contrast with NorthWestern, EEI argues that the eligibility of the Facility to certify as a QF must depend on its “rated capacity,” which EEI states should be measured as 210 MW based on the planned aggregate nameplate capacities of the solar and storage components of the Facility.¹⁷ EEI points to the conference report accompanying PURPA, which “indicate[d] that the power production of the facility is its ‘rated capacity.’”¹⁸ However, in relying on the rated capacity of the Facility, EEI makes the same mistake as NorthWestern: EEI ignores the requirements of NorthWestern’s own interconnection agreement and the physical limitations of the inverters, which ensure that the net output of the Facility shall never be greater than 80MW. EEI also ignores controlling Commission precedent, which holds that the proper measure of a QF’s power production capacity is its net output.

Recognizing the reality that a QF’s nameplate capacity can and will differ significantly from the actual amount of energy that it can deliver to the grid, the Commission has correctly interpreted power production capacity to mean a QF’s net output. This is supported by the U. S. Energy Information Administration’s (“EIA”) definitions of “Net Summer Capacity” and “Net

¹⁶ See *Conn. Valley Elec. Co., Inc. v. Wheelabrator Claremont Co., L.P.*, 82 FERC ¶ 61,116, at 61,421 n.25 (1988) (defining “net capacity” as “the maximum net output that the facility can safely and reliably achieve at the point of interconnection under the most favorable operating conditions likely to occur over a period of several years”).

¹⁷ EEI Protest at 2.

¹⁸ *Id.* at 4 (citing *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231, at 61,444 (1981) (“*Occidental Geothermal*”).

Winter Capacity,” which measure the maximum output that a generating facility can supply to system load during peak seasonal conditions.¹⁹ Indeed, in evaluating the potential market power of wholesale sellers of energy, the Commission has repeatedly allowed generation owners to use seasonal ratings because such ratings reflect the ability of a facility to meet instantaneous load. The Commission’s use of net output to measure the power production capacity of a QF is consistent with these definitions and uses, which reflect the physical reality of a generator’s ability to meet load, rather than a hypothetical ability measured as nameplate or rated capacity, which has no real relation to the amount of energy that a facility can send out to the grid.

The Commission made all of this clear in 1981 in *Occidental Geothermal*, stating that the power production of a QF should be measured as the “maximum net output of the facility which can be safely and reliably achieved under the most favorable operating conditions likely to occur over a period of several years.”²⁰ The Commission further stated that the “net output of a facility is its send out after subtraction of the power used to operate auxiliary equipment in the facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and exciters) and for other essential electricity uses in the facility from the gross generator output.”²¹ Accordingly, the Commission has already rejected the argument that power production capacity of a QF should be its nameplate capacity. Indeed, in *Occidental Geothermal*, the Commission stated that, in determining the power production capacity of a facility, it will not look to the nominal or rated capacity of a facility because the actual output of the facility’s equipment will often be different than its rated capacity due to a number of factors, including restrictions on the rate at which primary energy is supplied.²² EEI’s novel insistence on the use of artificial rated

¹⁹ See EIA Glossary available at: <https://www.eia.gov/tools/glossary/> (last visited Oct. 10, 2019).

²⁰ *Occidental Geothermal*, 17 FERC ¶ 61,231 at 61,445.

²¹ *Id.*

²² *Id.*

capacity numbers simply cannot be squared with the Commission’s ruling in *Occidental Geothermal* in 1981, and all subsequent decisions that have followed that ruling.

EEI responds that the Commission’s net output rule set forth in *Occidental Geothermal* allows a QF to “artificially limit” the power production capacity of its facility.²³ But the Commission has already rejected this argument as well. Thus, in cases where the net output of a QF has exceeded power production capacity thresholds set forth in the Commission’s regulations, the Commission has allowed the owners of such facilities to install control systems, including software and other devices to limit the net output of a facility and retain their QF benefits.²⁴ For example, in *Maryland Solar*, the owner of a solar PV project with a nameplate capacity of approximately 29 MW and a net capacity of 20 MW sought continued exemption from Sections 205 and 206 of the Federal Power Act even though its power production inadvertently exceeded 20 MW during limited instances. FERC granted the request based on representations from the owner that it had installed software and other upgrades sufficient to ensure that the power production capacity of the project would not exceed 20 MW.²⁵ As it did in *Occidental Geothermal*, FERC determined that it was appropriate to measure a QF’s power production capacity based on its net output to the grid. For years, developers have relied upon this and other similar FERC precedent to develop solar QFs with nameplate capacities that exceed 80 MW, but that have a power production capacity (*i.e.*, net output) that does not exceed 80 MW. If the Commission were to adopt EEI’s novel nameplate capacity rule, it would disrupt markets and contracts for an untold number of projects that are already in operation.

²³ EEI Protest at 5.

²⁴ See, e.g., *Lyonsdale Biomass, LLC*, 116 FERC ¶ 61,133 (2006); *Maryland Solar, LLC*, 146 FERC ¶ 61,071 (2014) (“*Maryland Solar*”).

²⁵ *Maryland Solar*, 146 FERC ¶ 61,071 at P 7.

Finally, as shown in the Application, the Pasley Affidavit, and in this Answer, there is nothing “artificial” about measuring the power production capacity of the Facility as the net output of its physical inverters. In the same way that a boiler or a generator may be of lower capacity than another facility component, and therefore determine a facility’s output, here the inverters are equally an integral component of the Facility. And because energy from the Facility must pass through the inverters, the power production capacity (*i.e.*, net capacity) of the Facility cannot exceed the physical limitations of its inverters. As such, the inverters do not even rise to the level of control device, which, in any event, were approved by the Commission in *Maryland Solar*.

IV. **CONCLUSION**

WHEREFORE, for the foregoing reasons, Broadview respectfully requests that the Commission grant its motion for leave to answer; determine that the Facility, whether deemed to be one or two projects, satisfies the size criteria set forth in PURPA and in the Commission's implementing regulations; and approve its application for certification of the Facility as a QF.²⁶

Respectfully submitted,

/s/ Adam Wenner

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Dated: October 17, 2019

²⁶ 18 C.F.R. § 292.204(a).

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, DC this 17th day of October 2019.

/s/ A. Cory Lankford

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169 FERC ¶ 61,189
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick and Bernard L. McNamee.

Broadview Solar, LLC

Docket No. QF17-454-004

ORDER TOLLING THE TIME FOR ISSUANCE OF AN ORDER

(Issued December 6, 2019)

1. On September 11, 2019, pursuant to section 292.207(b) of the Commission's regulations,¹ Broadview Solar, LLC (Broadview) filed an application for Commission certification of qualifying facility (QF) status (Application).
2. Notice of the Application was published in the *Federal Register*, 84 Fed. Reg. 49,291 (2019), with interventions and protests due on or before October 2, 2019. Edison Electric Institute and NorthWestern Corporation (NorthWestern) filed timely motions to intervene and protests. Broadview and NorthWestern filed answers.
3. Section 292.207(b)(3) of the Commission regulations requires the Commission to act within 90 days of the filing of an application for Commission certification of QF status.² Within 90 days, the Commission must inform the applicant that the application is deficient, issue an order granting or denying the application for qualifying status, or toll the time for issuance of such an order. In order to allow sufficient time for due consideration of the matters raised, we hereby toll the time for issuance of an order in this proceeding.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

¹ 18 C.F.R. § 292.207(b) (2019).

² 18 C.F.R. § 292.207(b)(3).

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button () for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oir_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do not use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at <http://earth.google.com>), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

Non-Public: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
Public (redacted): Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicant's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.
Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 11/30/2020

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) Broadview Solar LLC		
1b Applicant street address 5444 Westheimer Road Suite 1000		
1c City Houston	1d State/province TX	
1e Postal code 77056	1f Country (if not United States)	1g Telephone number 401-497-7566
1h Has the instant facility ever previously been certified as a QF? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF17 - 454 - 004		
1j Under which certification process is the applicant making this filing?		
<input checked="" type="checkbox"/> Notice of self-certification (see note below) <input type="checkbox"/> Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3)		
Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.		
1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply)		
<input checked="" type="checkbox"/> Qualifying small power production facility status <input type="checkbox"/> Qualifying cogeneration facility status		
1l What is the purpose and expected effective date(s) of this filing?		
<input type="checkbox"/> Original certification; facility expected to be installed by _____ and to begin operation on _____		
<input checked="" type="checkbox"/> Change(s) to a previously certified facility to be effective on <u>8/1/19</u> (identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)		
<input type="checkbox"/> Name change and/or other administrative change(s) <input checked="" type="checkbox"/> Change in ownership <input checked="" type="checkbox"/> Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output		
<input type="checkbox"/> Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)		
1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.		
<input type="checkbox"/> The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19)		
<input type="checkbox"/> The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted		
<input type="checkbox"/> The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)		

Contact Information	2a Name of contact person Steve Vavrik	2b Telephone number 401-497-7566
	2c Which of the following describes the contact person's relationship to the applicant? (check one) <p><input type="checkbox"/> Applicant (self) <input checked="" type="checkbox"/> Employee, owner or partner of applicant authorized to represent the applicant</p> <p><input type="checkbox"/> Employee of a company affiliated with the applicant authorized to represent the applicant on this matter</p> <p><input type="checkbox"/> Lawyer, consultant, or other representative authorized to represent the applicant on this matter</p>	
	2d Company or organization name (if applicant is an individual, check here and skip to line 2e) <input type="checkbox"/>	
	Broadview Solar LLC	
	2e Street address (if same as Applicant, check here and skip to line 3a) <input checked="" type="checkbox"/>	
	2f City	2g State/province
	2h Postal code	2i Country (if not United States)
	3a Facility name Broadview Solar LLC	
	3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) <input checked="" type="checkbox"/>	
3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional. Longitude <input type="checkbox"/> East (+) <input checked="" type="checkbox"/> West (-) 108.852 degrees Latitude <input checked="" type="checkbox"/> North (+) <input type="checkbox"/> South (-) 46.047 degrees		
3d City (if unincorporated, check here and enter nearest city) <input type="checkbox"/> Broadview		
3e State/province Montana		
3f County (or check here for independent city) <input type="checkbox"/> Yellowstone	3g Country (if not United States)	
Identify the electric utilities that are contemplated to transact with the facility.		
4a Identify utility interconnecting with the facility NorthWestern Energy		
4b Identify utilities providing wheeling service or check here if none <input checked="" type="checkbox"/>		
4c Identify utilities purchasing the useful electric power output or check here if none <input type="checkbox"/> Rocky Mountain Power, LLC		
4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none <input type="checkbox"/> NorthWestern Energy		

Ownership and Operation	5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.		
	Full legal names of direct owners		Electric utility or holding company
			If Yes, % equity interest
	1)	Broadview Solar LLC	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 100 %
	2)		Yes <input type="checkbox"/> No <input type="checkbox"/> %
	3)		Yes <input type="checkbox"/> No <input type="checkbox"/> %
	4)		Yes <input type="checkbox"/> No <input type="checkbox"/> %
	5)		Yes <input type="checkbox"/> No <input type="checkbox"/> %
	6)		Yes <input type="checkbox"/> No <input type="checkbox"/> %
	7)		Yes <input type="checkbox"/> No <input type="checkbox"/> %
8)		Yes <input type="checkbox"/> No <input type="checkbox"/> %	
9)		Yes <input type="checkbox"/> No <input type="checkbox"/> %	
10)		Yes <input type="checkbox"/> No <input type="checkbox"/> %	
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)			
<input type="checkbox"/> Check here if no such upstream owners exist. 			
Full legal names of electric utility or holding company upstream owners		% equity interest	
1)	VK Clean Energy Partners, LLP	100 %	
2)	Broad Reach Power LLC	100 %	
3)		%	
4)		%	
5)		%	
6)		%	
7)		%	
8)		%	
9)		%	
10)		%	
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
5c Identify the facility operator			
Broadview Solar LLC			

Energy Input	6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)		
	<input type="checkbox"/> Biomass (specify)	<input checked="" type="checkbox"/> Renewable resources (specify)	<input type="checkbox"/> Geothermal
	<input type="checkbox"/> Landfill gas	<input type="checkbox"/> Hydro power - river	<input type="checkbox"/> Fossil fuel (specify)
	<input type="checkbox"/> Manure digester gas	<input type="checkbox"/> Hydro power - tidal	<input type="checkbox"/> Coal (not waste)
	<input type="checkbox"/> Municipal solid waste	<input type="checkbox"/> Hydro power - wave	<input type="checkbox"/> Fuel oil/diesel
	<input type="checkbox"/> Sewage digester gas	<input checked="" type="checkbox"/> Solar - photovoltaic	<input type="checkbox"/> Natural gas (not waste)
	<input type="checkbox"/> Wood	<input type="checkbox"/> Solar - thermal	<input type="checkbox"/> Other fossil fuel (describe on page 19)
	<input type="checkbox"/> Other biomass (describe on page 19)	<input type="checkbox"/> Wind	
	<input type="checkbox"/> Waste (specify type below in line 6b)	<input type="checkbox"/> Other renewable resource (describe on page 19)	<input type="checkbox"/> Other (describe on page 19)
6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)			
<input type="checkbox"/> Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)			
<input type="checkbox"/> Anthracite culm produced prior to July 23, 1985			
<input type="checkbox"/> Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more			
<input type="checkbox"/> Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more			
Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste			
<input type="checkbox"/> Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste			
<input type="checkbox"/> Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation			
<input type="checkbox"/> Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)			
Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)			
<input type="checkbox"/> Materials that a government agency has certified for disposal by combustion (describe on page 19)			
<input type="checkbox"/> Heat from exothermic reactions (describe on page 19)		<input type="checkbox"/> Residual heat (describe on page 19)	
<input type="checkbox"/> Used rubber tires		<input type="checkbox"/> Plastic materials	
		<input type="checkbox"/> Refinery off-gas	
		<input type="checkbox"/> Petroleum coke	
Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)			
6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).			
Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input	
Natural gas	0 Btu/h	0 %	
Oil-based fuels	0 Btu/h	0 %	
Coal	0 Btu/h	0 %	

Technical Facility Information	<p>Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.</p>	
	7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	82,548 kW
	7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	1,245 kW
	7c Electrical losses in interconnection transformers	800 kW
	7d Electrical losses in AC/DC conversion equipment, if any	0 kW
	7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	503 kW
	7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	2,548.0 kW
	7g Maximum net power production capacity = 7a - 7f	80,000.0 kW
	7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.	
<p>The Facility will be comprised of a DC coupled solar PV array of 160 MWDC, a 4-hour 50MWDC battery energy storage system (200 MWh) that will be charged entirely with DC power produced by the solar PV array. The solar array and battery energy storage system will reside completely on the DC side of twenty (20) 4MW DC to AC inverters, which limit the total power delivered to point of interconnection under the interconnection agreement with Northwestern Energy to no more than 80 MWAC.</p> <p>The Solar Facility consists of Single Axis tracking PV Modules.</p> <p>Likely use of equipment below (the components may change in the future).</p> <p>471,323 Multi-c-Si Hanwha Q-Cells L-G4.2 340</p> <p>Total capacity of Solar Facility (not accounting for limitation based on solar inverters): 160.0 MW</p> <p>DC Degradation: 0%</p> <p>BESS - Lithium ion energy storage of 50 MWDC with 4-hour storage capability (not accounting for limitation based on solar inverters)</p> <p>Inverters</p> <p>20 GE 1500V 4MVA</p> <p>Unit capacity: 4000 AC kW</p> <p>Input voltage: 1500 DC V</p> <p>Total Facility capacity: 80.0 MWAC</p>		

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations	<p>Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) as amended by Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).</p>																			
	<p>8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.</p>																			
	<p>Check here if no such facilities exist. <input checked="" type="checkbox"/></p>																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Facility location (city or county, state)</th> <th style="text-align: left;">Root docket # (if any)</th> <th style="text-align: left;">Common owner(s)</th> <th style="text-align: left;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1) _____</td> <td>QF - _____</td> <td>_____</td> <td>kW</td> </tr> <tr> <td>2) _____</td> <td>QF - _____</td> <td>_____</td> <td>kW</td> </tr> <tr> <td>3) _____</td> <td>QF - _____</td> <td>_____</td> <td>kW</td> </tr> </tbody> </table>				Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1) _____	QF - _____	_____	kW	2) _____	QF - _____	_____	kW	3) _____	QF - _____	_____	kW
	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity																
	1) _____	QF - _____	_____	kW																
	2) _____	QF - _____	_____	kW																
	3) _____	QF - _____	_____	kW																
	<p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>																			
<p>8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?</p>																				
<p><input type="checkbox"/> Yes (continue at line 8c below) <input checked="" type="checkbox"/> No (skip lines 8c through 8e)</p>																				
<p>8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes <input type="checkbox"/> No <input type="checkbox"/></p>																				
<p>8d Did construction of the facility commence on or before December 31, 1999? Yes <input type="checkbox"/> No <input type="checkbox"/></p>																				
<p>8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes <input type="checkbox"/> No <input type="checkbox"/> If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.</p>																				
Certification of Compliance with Fuel Use Requirements	<p>Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																			
	<p>9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:</p>																			
	<p><input checked="" type="checkbox"/> Applicant certifies that the facility will use fossil fuels exclusively for the purposes listed above.</p>																			
<p>9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:</p>																				
<p>Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																				

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information	<p>Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.</p>	
	<p>10a What type(s) of cogeneration technology does the facility represent? (check all that apply)</p>	
	<input type="checkbox"/> Topping-cycle cogeneration	<input type="checkbox"/> Bottoming-cycle cogeneration
	<p>10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.</p>	
	Check to certify compliance with indicated requirement	Requirement
	<input type="checkbox"/>	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
	<input type="checkbox"/>	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
	<input type="checkbox"/>	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
	<input type="checkbox"/>	Diagram must specify average gross electric output in kW or MW for each generator.
	<input type="checkbox"/>	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
	<input type="checkbox"/>	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
	<input type="checkbox"/>	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
	<input type="checkbox"/>	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
<input type="checkbox"/>	Diagram must specify working fluid flow conditions at make-up water inputs.	

**EPAct 2005 Requirements for Fundamental Use
of Energy Output from Cogeneration Facilities**

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes No

11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes No

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

Yes (continue at line 11d below)

No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

No. Applicant certifies that energy will not be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) before selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements from Cogeneration Facilities (continued)

<p>Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.</p> <p>18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.</p> <p>The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.</p> <p>Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.</p> <p>Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).</p>	
11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g / (11g + 11h)	0 %
11j Is the response in line 11i greater than or equal to 50 percent?	
<p>Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.</p> <p>No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.</p>	



Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

<p>The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.</p>			
<p>12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use <i>in separate rows</i>.</p>		<p>Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)</p>	
	<p>Name of entity (thermal host) taking thermal output</p>	<p>Thermal host's relationship to facility; Thermal host's use of thermal output</p>	
1)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
2)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
3)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
4)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
5)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
6)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed			
<p>12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>			

Topping-Cycle Operating and Efficiency Value Calculation

<p>Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.</p> <p>If you indicated in line 10a that your facility represents <i>both</i> topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.</p>		
13a	Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b	Indicate the annual average rate of net electrical energy output	kW
13c	Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
13d	Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
13e	Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
13f	Indicate the annual average rate of energy input from natural gas and oil	Btu/h
13g	Topping-cycle operating value = $100 * 13a / (13a + 13c + 13e)$	0 %
13h	Topping-cycle efficiency value = $100 * (0.5 * 13a + 13c + 13e) / 13f$	0 %
13i	Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?	
<input type="checkbox"/> Yes (complies with operating standard) <input type="checkbox"/> No (does not comply with operating standard)		
13j	Did installation of the facility in its current form commence on or after March 13, 1980?	
<input type="checkbox"/> Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.		
<input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.		
13k	Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 45%:	
<input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)		
13l	Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:	
<input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)		



Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output															
<p>The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.</p>															
<p>14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process <i>in separate rows</i>.</p> <table border="1"> <thead> <tr> <th>Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production</th> <th>Thermal host's relationship to facility; Thermal host's process type</th> <th>Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)</th> </tr> </thead> <tbody> <tr> <td>1)</td> <td>Select thermal host's relationship to facility Select thermal host's process type</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td>2)</td> <td>Select thermal host's relationship to facility Select thermal host's process type</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td>3)</td> <td>Select thermal host's relationship to facility Select thermal host's process type</td> <td>Yes <input type="checkbox"/> No <input type="checkbox"/></td> </tr> </tbody> </table> <p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>				Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)	1)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>	2)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>	3)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>
Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)													
1)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>													
2)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>													
3)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>													
<p>14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>															

Bottoming-Cycle Operating and Efficiency Value Calculation

<p>Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.</p> <p>If you indicated in line 10a that your facility represents <i>both</i> topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).</p>	
<p>15a Did installation of the facility in its current form commence on or after March 13, 1980?</p> <p><input type="checkbox"/> Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.</p> <p><input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.</p>	
15b Indicate the annual average rate of net electrical energy output	kW
15c Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
15e Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
15f Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
15g Bottoming-cycle efficiency value = $100 * (15c + 15e) / 15f$	0 %
<p>15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:</p> <p><input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)</p>	

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

He or she has read the filing, including any information contained in any attached documents, such as cogeneration

mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.

He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.

He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)

The person on whose behalf the filing is made

An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made

An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made

A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign

He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.

He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature

Steve Vavrik

Your address

5444 Westheimer Road, Suite 1000
Houston, TX 77056

Date

1/29/2020

Audit Notes

Commission Staff Use Only:



Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 11:

The purpose of this filing is to report a change in upstream ownership and changes in the maximum gross power production capacity of the facility and other technical facility information. See Line 5b and Lines 7a through 7h.

On September 11, 2019, in Docket No. QF17-454-004, Broadview Solar LLC filed an Application for Certification of Qualifying Small Power Production Facility Status for the Broadview Solar facility, which presented the same changes as those described in the instant Notice of Self-Recertification.

172 FERC ¶ 61,194
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick, Bernard L. McNamee,
and James P. Danly.

Broadview Solar, LLC

Docket Nos. QF17-454-004
QF17-454-005

ORDER DENYING APPLICATION FOR CERTIFICATION AND REVOKING
STATUS AS A QUALIFYING SMALL POWER PRODUCTION FACILITY

(Issued September 1, 2020)

1. On September 11, 2019, in Docket No. QF17-454-004, Broadview Solar, LLC (Broadview) filed an application (Application) seeking Commission recertification as a small power production qualifying facility (QF) pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA)¹ and section 292.207(b) of the Commission's regulations.² On January 29, 2020, while Broadview's Application was pending before the Commission, in Docket No. QF17-454-005, Broadview filed a Form No. 556 self-certification of QF status identical to its Application. As discussed below, we deny the Application and revoke QF status for Broadview's duplicate self-certification.

I. Filing

2. Broadview states that it is developing a combined solar photovoltaic and battery storage facility in Yellowstone County, Montana that will interconnect to NorthWestern Corporation's (NorthWestern) transmission system.³ In December 2016, Broadview self-certified this facility as a small power production QF with a gross capacity of 104.25 MW and a net capacity of 80 MW.⁴ In March 2019, Broadview revised its Form

¹ 16 U.S.C. §§ 796(17), 824a-3 (2018).

² 18 C.F.R. § 292.207(b) (2019).

³ Broadview states that it has entered into a standard Large Generator Interconnection Agreement (LGIA) with NorthWestern for 80 MW of interconnection service. Transmittal at n.3.

⁴ Form No. 556, Application, Docket No. QF17-454-000, at 9 (filed Dec. 19, 2016).

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No. 556 to reflect a gross capacity of 160 MW, while maintaining the net capacity of 80 MW.⁵ In the instant Application, Broadview proposes to revise the facility's gross capacity from 160 MW to 82.5 MW to reflect the facility's design capabilities, including limiting elements, while again maintaining the previously documented net capacity of 80 MW.⁶ Broadview explains that the terminals of the 160 MW solar array and 50 MW battery storage system will both connect directly to 20 4.2 megavolt ampere (MVA) DC-to-AC inverters, which will convert the DC power produced by the solar array or discharged from the battery storage system to AC power. According to Broadview, solar arrays and battery storage facilities generate and store electricity as DC power, and the grid generally operates using AC power.⁷ Broadview states that, without the DC-to-AC inverters, the power is not in a form that can be transmitted onto the grid.⁸

3. Broadview claims that these inverters are the "gateway" between the DC power provided by the solar array and battery storage system and the AC grid because the amount that the 20 inverters can deliver limits the maximum gross power capacity of the facility (i.e., power that can be delivered to the AC grid). Broadview explains that, if the solar array produces more DC power than can be converted to AC power through the inverters or stored in the battery storage system, the inverters will cause the solar array to produce less power.⁹ Broadview states that the maximum gross output of the facility at any given time will be 82.5 MW and that, after deducting facility loads and losses, the maximum net capacity of the facility will be 80 MW.¹⁰

4. Broadview indicates that its facility is configured to optimize MWh production from the solar array and battery storage system within the 80 MW capacity limit specified

⁵ Form No. 556, Docket No. QF17-454-003, at 9 (March 13, 2019).

⁶ Form No. 556, Application, Docket No. QF17-454-004, at 9 (filed Sept. 11, 2019) (updating Broadview's Form No. 556 and requesting Commission certification of the facility that Broadview originally self-certified as an 80 MW solar facility in December 2016.)

⁷ Broadview Aff. at 2-4 (Pasley Aff.).

⁸ *Id.*

⁹ Broadview explains that: (1) the solar inverters are current-limited devices where the current limit is set by the safe operating temperature of the power electronics used to convert DC power to AC power; and (2) the capacity limitations imposed by the solar inverter are physical and the only way to increase the AC output of the facility is by adding additional inverters. *See id.* at 8, 9.

¹⁰ Transmittal at 7-8.

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in PURPA.¹¹ Broadview further explains that oversizing the solar array and combining it with battery storage increases the facility's capacity factor from a typical 25% for solar facilities to nearly 40%. Broadview states that, therefore, regardless of how the facility is operated, the facility is physically incapable of exceeding the 80 MW limit because of the presence of the 20 inverters.¹²

5. Broadview asserts that the Commission's finding in *Occidental Geothermal, Inc.* that "a facility's power production capacity is not necessarily determined by the nominal rating of even a key component of the facility" supports Broadview's claim that the facility is within the 80 MW limit.¹³ Broadview also points to the Commission's determination in *Malacha Power Project, Inc.*, which states that "the electric power production capacity of the facility is the capacity that the electric power production equipment delivers to the point of interconnection with the purchasing utility's transmission system."¹⁴ Based on this precedent, Broadview argues that the size and capability of the individual components that will comprise the facility, including the solar array and the battery storage system, are not relevant to the determination of the facility's capacity but rather it is the facility's configuration (together, the solar array, battery storage system, and inverters), which limits the potential output to 80 MW.¹⁵

6. Broadview states that its facility is different from a configuration that relies on SCADA or other automated generation control to limit the net power production of a facility. Broadview asserts that the inverters are unable to convert any more than 82.5 MW from DC power to AC power. Broadview explains that the only way to

¹¹ *Id.* at 4.

¹² See *id.* at 3-5, 8-9. Broadview notes that the facility will be capable of sustaining its maximum output for additional hours in the day.

¹³ *Id.* at 3-5 (citing *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231, at 61,445 (1981) (*Occidental*)). Broadview notes that, in *Conn. Valley Elec. Co. v. Wheelabrator Claremont Co.*, the Commission defined net capacity as "the maximum net output that the facility can safely and reliably achieve at the point of interconnection under the most favorable operating conditions likely to occur over a period of several years." *Id.* at n.5 (citing *Conn. Valley Elec. Co. v. Wheelabrator Claremont Co.*, 82 FERC ¶ 61,116, at 61,421 n.25 (1998) (*Connecticut Valley*)).

¹⁴ *Id.* at 8 (quoting *Malacha Power Project, Inc.*, 41 FERC ¶ 61,350 (1987)) (*Malacha*).

¹⁵ *Id.* at 2-5.

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increase the facility's capacity would be to physically install additional inverters.¹⁶ Broadview states that 2.5 MW of output is consumed by parasitic station power (primarily cooling for the battery storage system as well as the substation electrical enclosure), electrical losses, and interconnection losses.¹⁷ Broadview explains that, when the solar array produces more DC energy than the inverters can convert to AC energy, that excess energy is stored in the battery and not delivered to the point of interconnection.¹⁸

7. Broadview states that its battery storage system qualifies as part of a QF because the solar array will provide all of the charging energy used for the battery storage system.¹⁹ Broadview contends that viewing its facility's solar array and battery storage system instead as two separate QFs, so that their power production capacities would be subject to aggregation, would artificially inflate the aggregate capacity of the facility components.²⁰ Broadview claims that, because both the solar array and the battery storage system are behind the inverters and the inverters can convert no more than 82.5 MW of energy from the facility, the maximum gross power production capacity of the combined solar array and battery storage system is properly viewed as 82.5 MW, and, with the various losses, the maximum net power production capacity is 80 MW.²¹

II. Notice and Pleadings

8. Notice of the Application was published in the *Federal Register*, 84 Fed. Reg. 49,291 (Sept. 19, 2019), with interventions and protests due on or before October 2, 2019.²² Edison Electric Institute (EEI) and NorthWestern filed timely motions to intervene and protests. NorthWestern and Broadview filed answers.

¹⁶ *Id.* at 7.

¹⁷ *Id.* at 7-8; Pasley Aff. at 5-7.

¹⁸ Transmittal at 7.

¹⁹ *Id.* at 5 (citing *Luz Dev. and Finance Corp.*, 51 FERC ¶ 61,078, at 61,171 (1990) (*Luz*) (finding that battery storage qualifies as a QF if it is charged at least 75% by a qualifying fuel source)).

²⁰ *Id.* at 5-6.

²¹ *Id.*

²² Section 292.207(b)(3) of the Commission's regulations requires the Commission to act within 90 days of the filing of an application for Commission certification of QF status. 18 C.F.R. § 292.207(b)(3). In order to allow sufficient time

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A. Protests

9. NorthWestern argues that Broadview's facility is not a single QF and thus exceeds the 80 MW limit in PURPA.²³ NorthWestern asserts that, contrary to Broadview's interpretation of *Occidental*, a facility's individual components are relevant to the calculation of net capacity.²⁴ NorthWestern contends that, in *Occidental*, the Commission found that, if a facility has the potential to produce more than 80 MW for limited periods of time due to circumstances outside of the facility's control, the facility can still qualify as a QF.²⁵

10. NorthWestern argues that the solar array and battery storage system should be considered two distinct small power production facilities at the same site because the 160 MW solar array exceeds the 80 MW net capacity limit and, consistent with *Luz*, the battery storage system also qualifies separately as a small power QF.²⁶ NorthWestern asserts that Broadview's reliance on *Connecticut Valley* is misplaced because that proceeding did not involve the combination of multiple small power production facilities as a single QF nor did the Commission's determination overrule or otherwise support a reading of section 292.204(a)(1) of the Commission's regulations implementing the 80 MW limit that is contrary to the plain terms of that regulation.²⁷ NorthWestern points to *Northern Laramie Range Alliance*, where the Commission rejected the concept that two separate QFs should be treated as a single QF if they use the same line to deliver energy from their facilities to a single point on the transmission system.²⁸ Based on that precedent, NorthWestern argues that Broadview's facility should not be considered a single QF because the solar array and battery storage system utilize the same point of

for due consideration of the matters raised, on December 6, 2019, the Commission issued a notice tolling the time for issuance of an order in Docket No. QF17-454-004. *Broadview Solar, LLC*, 169 FERC ¶ 61,189 (2019).

²³ NorthWestern Protest at 6.

²⁴ *Id.* at 12-13.

²⁵ *Id.* at 13 (citing *Occidental*, 17 FERC ¶ 61,231 at 61,445).

²⁶ *Id.* 6-7, 10-11 (citing *Luz*, 51 FERC ¶ 61,078 at 61,170, 61,172).

²⁷ *Id.* at 9 (citing 18 C.F.R. § 292.204(a)(1)) (2019).

²⁸ *Id.* at 10 (citing *Northern Laramie Range Alliance*, 138 FERC ¶ 61,171, at PP 15-16 (2012) (*Northern Laramie*)).

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interconnection.²⁹ NorthWestern asserts that, instead, the net output of the solar array and battery storage system should be calculated individually and then aggregated to determine if the combined system is within the 80 MW limit.³⁰ NorthWestern contends that, under that analysis, Broadview cannot be a QF because its capacity exceeds the 80 MW limit.³¹ NorthWestern argues that treating Broadview's battery storage facility as part of the overall facility instead of as a separate power production facility would have far-reaching impacts because the Commission currently treats storage facilities as primary generation resources and does not treat them as ancillary or secondary to the generation process.³²

11. EEI argues that the Commission should not allow resource providers to artificially limit the output from their facilities at a single location in order to stay within the 80 MW limit.³³ With the growth of new technologies, such as batteries, and the increased sophistication of resources, EEI asks the Commission to reconsider whether it is still appropriate to measure QF power production capacity based on net capacity as established in *Occidental*, rather than the rated capacity test that EEI asserts was initially intended by Congress.³⁴ EEI states that, under a rated capacity test, the Commission would only assess the rated capacity of all devices capable of delivering power to the grid and ignore the use of artificial devices that prevent the rated capacity from ultimately reaching the electric utility's system.³⁵ EEI argues against permitting batteries or other storage devices paired with renewable facilities located at the same site to qualify as a QF

²⁹ *Id.* at 10.

³⁰ *Id.* at 9.

³¹ *Id.* at 6, 9.

³² *Id.* at 11-12 (citing *Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Order No. 841, 162 FERC ¶ 61,127 (2018), *order on reh'g*, Order No. 841-A, 167 FERC ¶ 61,154 (2019); *Reform of Generator Interconnection Procedures and Agreements*, Order No. 845, 163 FERC ¶ 61,043, at P 275 (2018), *order on reh'g*, Order No. 845-A, 166 FERC ¶ 61,137 (2019), *errata notice*, 167 FERC ¶ 61,123, *order on reh'g*, Order No. 845-B, 168 FERC ¶ 61,092 (2019)).

³³ EEI Protest at 2.

³⁴ *Id.* at 6.

³⁵ *Id.*

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if the combined rated capacity of all devices is above 80 MW.³⁶ EEI asserts that Congress' use of the term "power production capacity" means that Congress did not intend to allow such arrangements.³⁷

B. Answers

12. Broadview argues that, contrary to NorthWestern's description, the solar array and battery storage system will operate as a single, integrated hybrid facility interconnected at a single interconnection point pursuant to a single interconnection agreement.³⁸

Broadview explains that, while the planned solar array is sized greater than 80 MW to increase the facility's capacity factor, the aggregate capacity of the solar array and battery storage system cannot exceed 80 MW net capacity due to the DC-to-AC inverters.³⁹ Broadview further notes that, because the facility's components that exceed the 80 MW to improve the facility's capacity factor exist only behind the inverters, they do not affect the facility's maximum net output of 80 MW.⁴⁰

13. In response to EEI's argument for determining a small power production facility's production capacity based on its rated capacity, Broadview argues that EEI ignores the fact that the physical limitations of the inverters and the LGIA with NorthWestern ensure that the net output of the facility will not be greater than 80 MW. Broadview adds that, in *Occidental*, the Commission rejected the argument that a QF's power production capacity should be its rated capacity because the actual output of the facility's equipment will often be different than its rated capacity.⁴¹

14. Broadview notes that the Commission has also rejected the argument that the net output rule in *Occidental* allows a QF to artificially limit the power production capacity of its facility.⁴² Broadview adds that there is nothing artificial about measuring a

³⁶ *Id.* at 7.

³⁷ *Id.* at 6-7.

³⁸ Answer at 3-6.

³⁹ Broadview adds that, in order to remain within the manufacturer's warranty, it cannot use the inverters to convert additional power from the facility. *Id.* at 5.

⁴⁰ *Id.* at 6.

⁴¹ *Id.* at 7 (citing *Occidental*, 17 FERC ¶ 61,231 at 61,445).

⁴² *Id.* at 8 (citing *Lyonsdale Biomass, LLC*, 116 FERC ¶ 61,133 (2006); *Maryland Solar, LLC*, 146 FERC ¶ 61,071 (2014)).

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facility's power production capacity as the net output of its physical inverters because an inverter is an equally integral component of the facility like a boiler or generator that may be of lower capacity than another facility component that is used to determine a facility's output.⁴³ Broadview contends that the Commission's adoption of EEI's rated capacity proposal would disrupt markets and contracts for untold numbers of facilities already in operation because developers have relied upon Commission precedent to develop solar QFs with nameplate capacities that exceed 80 MW but with power production capacities (i.e., net output) that do not exceed 80 MW.⁴⁴

15. NorthWestern argues that Broadview's answer is not responsive to NorthWestern's assertions that the solar array and battery storage system are separate QFs and that their combined capacity exceeds 80 MW. NorthWestern claims that neither Broadview's LGIA nor shared interconnection point support Broadview's claim that it is a single QF because, in Order No. 2003, the Commission stated that a "Generation Facility" under the Large Generator Interconnection Process could consist of multiple generating units and that Commission precedent permits multiple QFs to interconnect at a single point.⁴⁵

16. In response, Broadview reiterated its claim that, despite whether the solar array and battery storage are separate facilities, their aggregate capacities do not exceed 80 MW because the facility's inverters and interconnection facilities ensure that the delivery at the point of interconnection cannot exceed 80 MW.⁴⁶

III. Commission Determination

17. As discussed below, we deny Broadview's Application. We find that its facility exceeds the 80 MW statutory limit for small power production QFs that Congress imposed in PURPA.

18. PURPA and the Commission's regulations limit small power production QFs to a "power production capacity" of 80 MW.⁴⁷ In *Occidental*, the Commission discussed its

⁴³ *Id.* at 9.

⁴⁴ *Id.* at 8.

⁴⁵ NorthWestern Answer at 2-3 (citing *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, 104 FERC ¶ 61,103 at P 46 (2003); *Gamma Mariah, Inc.*, 44 FERC ¶ 61,442 (1988)).

⁴⁶ Broadview Second Answer at 2-3.

⁴⁷ 16 U.S.C. § 796(17)(A)(ii) (2018); 18 C.F.R. § 292.204(a)(1).

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interpretation of the term “power production capacity” as it applies to QFs.⁴⁸ In that order, the Commission emphasized that the facility’s “send out,” not the size of individual components, was determinative. The Commission stated that it would consider the “power production capacity” of a facility to be the maximum net output of the facility that can be safely and reliably achieved under the most favorable operating conditions likely to occur over a period of several years. The Commission further specified that “[t]he net output of the facility is its send out after subtraction of the power used to operate auxiliary equipment in the facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and excitors) and for other essential electricity uses in the facility from the gross generator output.”⁴⁹

19. In *Malacha*,⁵⁰ the Commission determined that, because the switchyards and transmission lines should be considered part of the facility, the facility’s capacity should be measured at the end of such switchyards and lines. The Commission found that the facility’s net electric power production capacity should be determined at the point of interconnection and not within the facility itself (i.e., after consideration of losses, etc.).⁵¹

20. In *American Ref-Fuel Co.*, the Commission granted American Ref-Fuel Company of Bergen County’s (American Ref-Fuel) application for recertification of its small power production biomass facility as a QF.⁵² American Ref-Fuel proposed to replace two turbines with a single turbine with a maximum gross output of 91 MW and a maximum net output of 80 MW, after accounting for auxiliary loads but acknowledged that its net output would often exceed 80 MW due to the substantial variation in the heat content of the solid waste that the facility burned as fuel. The facility was equipped with an automatic control system that would restore net generation at the 80-MW level, on average, over any 60-minute span measured at any point in time. The Commission stated that the issue was “whether the small power production facility, as reconfigured, continue[d] to satisfy the requirement of both [PURPA] and the Commission’s regulations that a small power production facility have a power production capacity that is not greater than 80 MW.”⁵³ The Commission found that American Ref-Fuel’s facility

⁴⁸ *Occidental*, 17 FERC ¶ 61,231 at 61,445.

⁴⁹ *Id.* at 61,445.

⁵⁰ *Malacha*, 41 FERC ¶ 61,350.

⁵¹ *Id.*

⁵² *American Ref-Fuel Co. of Bergen County*, 54 FERC ¶ 61,287 (1991) (*American Ref-Fuel*).

⁵³ *Id.* at 61,816.

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did *not* exceed the 80 MW limit, explaining that, although PURPA and the Commission's regulations limit the power production capacity of a qualifying small power production facility to 80 MW, PURPA and the Commission's regulations do not offer guidance on how to compute the maximum size. The Commission accepted that the control system would limit the maximum net output to 80 MW in any rolling one-hour period and concluded that QF status was appropriate.⁵⁴

21. Through PURPA, Congress sought to encourage small power production facilities of not more than 80 MW capacity and, in fact, specified that such facilities should have a "power production capacity" of not greater than 80 MW.⁵⁵ Prior Commission precedent sometimes allowed facilities with greater power production capacities to be certified as QFs when the net output was no more than 80 MW and also sometimes allowed intermittent net outputs slightly in excess of 80 MW. We find, however, there is a significant difference between (i) design capabilities that may incidentally or occasionally⁵⁶ cross PURPA's 80 MW threshold due to certain components or variances, such as fuel or ambient temperature and (ii) a facility purposefully designed with a 160 MW solar array.⁵⁷

22. Broadview's proposal represents a significant departure from any project that the Commission has previously considered under a QF application. That such a project arguably could satisfy the "send out" analysis the Commission applied in *Occidental* compels us to reconsider whether it is a facility's "send out" that is determinative of whether the facility complies with the 80 MW threshold established in PURPA.

23. Based on such reconsideration, we find that the Commission's statement in *Occidental* that "'the power production capacity' of a facility is 'the maximum net output of the facility,' which is 'its send out,'"⁵⁸ is not consistent with the 80 MW "power production capacity" limit expressly specified by the statute and regulations. Re-examining *Occidental* and the potential such an analysis creates for the approval of projects that do not comply with the plain language of PURPA, we conclude that we have

⁵⁴ *Id.* at 61,817.

⁵⁵ 16 U.S.C. §§ 796(17)(A)(ii), 824a-3(a).

⁵⁶ *Occidental*, 17 FERC ¶ 61,231 at 61,445.

⁵⁷ In this order, because the 160 MW solar array is double the 80 MW statutory limit for power production capacity, we do not need to address whether the associated battery storage system is a separate facility or whether and how the battery storage system should be considered in determining the facility's power production capacity.

⁵⁸ *Occidental*, 17 FERC ¶ 61,231 at 61,445.

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improperly focused on “output” and “send out,” instead of on “power production capacity,” which is the standard established both in the statute and our regulations.⁵⁹ In circumstances such as the factual context before us in this proceeding, the two are not the same. Therefore, on further consideration, we find that the “send out” analysis applied in *Occidental* is inconsistent with the 80 MW “power production capacity” limitation in PURPA for small power production QFs, based on our reading of the statute and regulations.

24. We note, in this regard, that Form No. 556 starts with the facility’s maximum gross power production capacity at line 7a and then subtracts certain parasitic loads and losses to yield the facility’s maximum net power production capacity, that is, the facility’s ultimate certified capacity. Such parasitic loads and losses—and only those amounts—can be recorded in lines 7b through 7e, as deductions, with the total deductions reflected in line 7f.⁶⁰ Line 7g reflects the difference between the maximum gross power production capacity provided in line 7a minus the total deductions allowed in line 7f. Consistent with the application of the statute and regulation noted above, the amount in line 7g, the net power production capacity, cannot exceed the 80 MW statutory and regulatory limit.

25. Here, Broadview’s facility exceeds the 80 MW statutory limit for “power production capacity.” We find that Broadview cannot meet the statutory limit by relying on inverters as a limiting element on a QF’s output. As Broadview acknowledges, the solar array has the capability to produce 160 MW of DC power.⁶¹ The inverters are capable of converting only 80 MW into AC power, but that is a conversion limit, not a limit on the facility’s power production capacity. Thus, line 7a of Form No. 556 records the “maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions” and does not include

⁵⁹ 16 U.S.C. § 796(17)(A)(ii); 18 C.F.R. § 292.204(a)(1). The dissent argues that allowing 160 MW of solar array along with a 50 MW battery improves the facility’s capacity factor. Dissent at P 2. But the applicable statutory standard considers a facility’s power production capacity, not its capacity factor. This argument proves no more than that the ability of the facility to increase its capacity factor is dependent on having a power production capacity that exceeds 80 MW; hence, the necessity for the Commission to return to the statutory language and limit set forth in PURPA.

⁶⁰ Therefore, we find that Broadview incorrectly filled out the Form No. 556 by entering 82.5 MW for line 7a. We clarify that, to the extent it was not already clear, lines 7b through 7e of Form No. 556 may record only the parasitic loads and losses that occur independent of the output limiting function of inverters or other output limiting devices.

⁶¹ As we noted above, we do not address the associated battery storage system in this order. *See supra* note 57.

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adjustments for inverters or other output-limiting devices. Utilizing inverters to limit the output of an otherwise above-80 MW power production facility to 80 MW is, we believe, inconsistent with the type of facility that Congress specified can qualify as a small power production facility (i.e., a facility sized 80 MW or less).⁶²

26. We clarify that our findings here related to the measure of a QF's certified capacity, that is, its maximum net power production capacity, will not change the way in which maximum net power production capacity is reported on Form No. 556. That is, on the Form No. 556, the maximum gross power production capacity shall still be reduced for load and line losses to calculate the "maximum net power production capacity."⁶³

27. In response to Broadview's comments regarding industry disruption, this finding is prospective and does not affect QFs that have self-certified or have been granted Commission certification prior to the date of this order. If a QF that has listed a maximum net power production capacity of 80 MW or less has a Form No. 556 on file with the Commission prior to the date of this order, even if it may have included adjustments for inverters or other output-limiting devices to calculate its maximum net power production capacity as 80 MW or less, then it will be grandfathered with regard to the holding in *Occidental*. In other words, those previously certified QFs will still be considered to be small power production facilities for purposes of PURPA. Moreover, procurement of a legally enforceable obligation, by itself, is insufficient; given the nature of our ruling today, explaining how we now see that the requisite Form No. 556 must be completed, it is appropriate that the grandfathering adopted here for existing QFs be tied to such QFs having submitted a Form No. 556.

28. For the same reasons discussed herein, we also revoke QF status of Broadview's facility based on its January 29, 2020 Form No. 556 self-certification, in Docket No. QF17-454-005, which is identical to the Form No. 556 filed in the instant Application and was filed while the Application was before the Commission.⁶⁴

The Commission orders:

(A) Broadview's Application in Docket No. QF17-454-004 is hereby denied, as discussed in the body of this order.

⁶² Consistent with the Commission's determination in *Malacha* regarding allowable deductions, load and line losses may still be deducted from a QF's gross power production capacity to determine net power production capacity. *Malacha*, 41 FERC ¶ 61,350.

⁶³ See *supra* note 57.

⁶⁴ Form No. 556, Application, Docket No. QF17-454-005 (filed Jan. 29, 2020).

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(B) Broadview's self-certification of QF status in Docket No. QF17-454-005 is hereby revoked, as discussed in the body of this order.

By the Commission. Commissioner Glick is dissenting with a separate statement attached.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Broadview Solar, LLC

Docket Nos. QF17-454-004
QF17-454-005

(Issued September 1, 2020)

GLICK, Commissioner, *dissenting*:

1. I dissent from today's order denying Broadview Solar LLC's (Broadview) application for Qualifying Facility (QF) status under the Public Utility Regulatory Policies Act of 1978 (PURPA).¹ Under any fair reading of the statute or Commission precedent, Broadview's power production capacity is 80 MW, making it eligible for QF status. The Commission's contrary determination will make QF status turn on the capacity of any one component of the facility, rather than the actual power production capacity of the facility itself. That conclusion finds no support in the statute, our precedent, or common sense.
2. Broadview's facility is a hybrid resource that is made up of, among other things, a 160 MW solar array and a 50 MW battery storage resource.² Critically, however, the inverters that convert the DC electricity generated by the solar panels into AC electricity that can be delivered to the grid have a net capacity of only 80 MW.³ That means that Broadview's facility is physically incapable of producing more than 80 MW of electricity for any subsequent use.⁴ Instead of increasing the *power production capacity* of Broadview's facility, the large solar array enhances its *capacity factor*, meaning that the facility will, all else equal, generate a higher fraction of its total 80 MW capacity than it

¹ Pub. L. No. 95-617, 92 Stat. 3117 (1978).

² *Broadview Solar, LLC*, 172 FERC ¶ 61,194, at P 2 (2020) (Order).

³ Broadview states that the 20 inverters would be capable of converting only 82.5 MW of capacity from DC to AC power, with a maximum net capacity of 80 MW after accounting for on-site parasitic load of 2.5 MW. Broadview October 17, 2019 Answer at 4 ("[P]ower generated by the Solar PV Arrays or discharged from the [battery energy storage system] must be converted by inverters from dc to ac power before being sent out for injection into the ac transmission grid.").

⁴ Lending further support to that conclusion, the interconnection studies executed by NorthWestern Corporation, the interconnecting utility, identify Broadview's summer and winter output as 80 MW, and the interconnection agreement, provides that the total size of the "Project will be 80 MW based on the max output of the inverters." *Id.* at 4.

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would with a smaller array. That makes the system more efficient—a result I would have thought the Commission would be eager to encourage. In addition, Broadview’s 50 MW battery system cannot “produce” power in any conventional sense of that term.⁵ Instead, the electricity discharged by the battery is produced exclusively by the solar array. As with the solar array, the battery increases the capacity factor of the facility, not the facility’s actual power production capacity. The bottom line is that while Broadview’s configuration may allow it to more predictably produce electricity, that configuration does not give it a power production capacity greater than 80 MW.

3. And that is what matters under PURPA. The statute provides that QF status is available to a “small power production facility,” which is defined as, among other things, a “facility” that produces power from one of a series of enumerated resource types and has a “power production capacity” of not more than 80 MW.⁶ It is hard for me to understand how the term “facility” could mean anything other than the power plant as a whole. After all, as used in this context, the term “facility” typically refers to an entire building or structure, not its component parts.⁷ For that reason, when someone uses the terms “transportation facilities” or “educational facilities”⁸ no one would think those terms refer to the engine of a train or the books in a school, even though they are utterly essential to serving those facilities’ respective purposes. The same goes when it comes to defining the power production capacity of a small power production facility: the term “facility” indicates that QF status should turn on the actual power production capacity of the resource as a whole, not the capacity of its largest individual component part.⁹

⁵ Although today’s order does not address the battery storage resource because it disqualifies Broadview on the basis of its solar array alone, *see Order, 172 FERC ¶ 61,194 at n.57*, I must address the battery as part of my reasoning for why Broadview qualifies as a QF.

⁶ 16 U.S.C. § 796(17).

⁷ See, e.g., *facility*, Merriam Webster Dictionary, <https://www.merriam-webster.com/dictionary/facility> (last visited Sept. 1, 2020) (defining a facility, for these purposes, as “something (such as a hospital) that is built, installed, or established to serve a particular purpose”).

⁸ Both are listed as examples of a facility. *See facility*, Dictionary.com, <https://www.dictionary.com/browse/facility> (last visited Sept. 1, 2020).

⁹ And there is every reason to believe that is what Congress had in mind. The conference report accompanying PURPA describes a small power production facility by referring to, for example, “solar electric systems.” H.R. Rep. No. 95-1750, at 89 (1978). As with facility, “system” would seem to contemplate the power plant as a whole, not just its photovoltaic panels. That understanding is also consistent with contemporary

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4. Commission precedent is consistent with that common-sense understanding. In order after order, the Commission has conducted a straightforward examination of the power production capacity of the facility as a whole, rather than nitpicking the capability of each component. That approach makes sense for several reasons, including, as the Commission explained in *Occidental Geothermal, Inc.*, the commercial reality that “it is not uncommon for smaller facilities to find it most economic to employ commercially available components some of which have individual capabilities significantly exceeding the overall facility capabilities.”¹⁰ Looking to the size of each component would upset that otherwise straightforward inquiry and cause the Commission to insert itself unnecessarily into commercial decisions that are better made by project developers than federal regulators. Perhaps that is why the Commission has, until today, consistently taken a pragmatic approach to defining the power production capacity¹¹—one that is consistent with Congress’s directive that the Commission should “encourage” QF development.¹² Those interpretations have been settled policy for decades at this point.

terminology: The North American Electric Reliability Corporation’s definition of bulk power system equipment describes solar “power producing resources” as, together, the photovoltaic panels *and* the associated inverters. *See N. Am. Elec. Reliability Corp., Bulk Electric System Definition Reference Document* at 18-20 (Aug. 2018), *available at* www.nerc.com/pa/Stand/2018%20Bulk%20Electric%20System%20Definition%20Reference/BES_Reference_Doc_08_08_2018_Clean_for_Posting.pdf.

¹⁰ 17 FERC ¶ 61,231, 61,445 (1981) (expressly rejecting the idea that a facility’s “power production capacity” should be “determined by the nominal rating of even a key component of the facility”).

¹¹ *See, e.g., American Ref-Fuel Co.*, 54 FERC ¶ 61,287, 61,816-17 (1991) (finding that a waste-to-energy facility’s power production capacity was 80 MW because it had a control system that would restore net generation to an average of no more than 80 MW over any 60-minute span measured at any point in time, even though the installed nameplate capacity of the facility exceeded 80 MW and the minute-to-minute output might vary with the energy content of the waste being burned); *Malacha Power Project, Inc.*, 41 FERC ¶ 61,350 (1987) (finding that “electric power production capacity of the facility is the capacity that the electric power production equipment delivers to the point of interconnection with the purchasing electric utility’s transmission system”); *Occidental*, 17 FERC ¶ 61,231 at 61,444 (looking to the power production capacity of a facility as a whole rather than any single component).

¹² 16 U.S.C. § 824a-3(a).

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5. Nevertheless, in a break from precedent, today’s order denies Broadview’s application for QF status. The Commission concludes that Broadview’s power production capacity exceeds the 80-MW ceiling for qualifying as a QF based entirely on the fact that its solar array is rated at 160 MW. But the Commission makes no effort to explain why it is appropriate to determine a qualifying *facility*’s power production capacity based on that facility’s component parts rather than looking to the power production capacity of the facility as a whole. As noted above, Broadview’s inverters prevent the facility from ever providing more than 80 MW of electricity to the grid and focusing on that figure—*i.e.*, the potential output of the facility as a whole, not its sub-components—is far more consistent with the PURPA’s text, purpose, and legislative history.¹³ The Commission’s failure to wrestle with those arguments is arbitrary and capricious.

6. Making matters worse, in order to reach its preferred outcome, the Commission throws overboard *Occidental*, a 40-year old precedent.¹⁴ *Occidental* focused the QF determination on a facility’s “send out” capacity, expressly rejecting the component-by-component approach adopted in today’s order.¹⁵ The Commission justifies its abandonment of that precedent by asserting that focusing on “send out” capacity might allow a facility whose power production capacity exceeds 80 MW to qualify as a QF.¹⁶

7. But that just takes us back to square one. The problem that purportedly justifies jettisoning *Occidental* arises only as a result of the Commission’s misguided component-by-component approach to determining power production capacity. If the Commission were to instead continue to look to the power production capacity of a facility as a whole, as advocated for above, its stated concerns about *Occidental* would evaporate. Finally, on a broader level, I cannot help but express my concern that so casually upending settled precedent creates unnecessary uncertainty, making it hard for developers to know which precedents they can count on and which they cannot.

¹³ See *supra* PP 3-4.

¹⁴ Order, 172 FERC ¶ 61,194 at PP 22-23.

¹⁵ *Supra* P 4 & n.10.

¹⁶ Order, 172 FERC ¶ 61,194 at P 23.

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For these reasons, I respectfully dissent.

Richard Glick
Commissioner

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar, LLC)
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)
Docket Nos. QF17-454-004
 QF17-454-005

REQUEST FOR REHEARING OF BROADVIEW SOLAR LLC

Pursuant to Section 313 of the Federal Power Act (“FPA”), 16 U.S.C. § 825l, and Rules 212 and 713 of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 385.713 (2020), Broadview Solar LLC (“Broadview”) submits this Request for Rehearing of the Commission’s September 1, 2020 Order (“Order”) in which it denied Broadview’s application for recertification of its generating facility¹ (“Broadview Facility”) as a small power production qualifying facility (“QF”) pursuant to Section 3(17)(C) of the FPA, 16 U.S.C. § 796(17)(C), and Section 292.207(b) of the Commission’s regulations.² Broadview also requests rehearing of the Commission’s revocation of QF status for Broadview’s Notice of Self-Certification.³

I. STATEMENT OF ISSUES

Without providing sound reasons for the change, the Commission deviated from established precedents on which the renewable industry has continuously relied for nearly 40 years. In the Order, the Commission overturned settled precedent dating back to *Occidental Geothermal, Inc.*⁴ in 1981 and *Malacha Power Project, Inc.*⁵ in 1987, that, for purposes of determining of a facility satisfies the statutory requirement that its “power production capacity”

¹ Application for Certification of Qualifying Small Power Production Facility Status, Docket No. QF17-454-004 (filed Sept. 11, 2019) (Broadview Application).

² *Broadview Solar, LLC*, 172 FERC ¶ 61,194 (2020).

³ Form 556, Notice of Self-Recertification of Qualifying Facility Status, Docket No QF17-454-005 (filed Jan. 29, 2020).

⁴ 17 FERC ¶ 61,231 (1981) (*Occidental*).

⁵ 41 FERC ¶ 61,350 (1987) (*Malacha*).

not be greater than 80 megawatts,⁶ (i) the appropriate test is the amount of capacity, in megawatts, that the facility can actually deliver to the point of interconnection with the interconnecting utility, and (ii) the power production capacity of a facility is not determined by the capacity of any individual component of the facility, but by the “send-out” capacity of the facility. The Order, without explanation, similarly overturned settled Commission precedent established in *Connecticut Valley Electric Co. v. Wheelabrator Claremont Co.*,⁷ in 1998, holding that the capacity of a small power QF is “the maximum net output that the facility can safely and reliably achieve at the point of interconnection under the most favorable operating conditions likely to occur over a period of several years.”⁸ As the Supreme Court has held, an agency deviating from a past position must both display “awareness that it *is* changing position” and offer “good reasons” for the changed position.⁹ Thus, if an “the agency wishes to depart from its consistent precedent it must provide a principled explanation for its change of direction.”¹⁰ The D.C. Circuit has explained in the FERC context, this means that “[t]he failure to admit or explain . . . a basic change in the interpretation of a statutory standard” is a grounds for reversal because such failures “undermine[] the integrity of the administrative process.”¹¹ Here, the Commission failed to provide good reasons for the change from past FERC precedent. Under controlling precedent, when an agency fails to explain its deviation from established precedent, as here, “its decision will be vacated as arbitrary and capricious.”¹²

⁶ FPA Section 3(17)(A)(ii), 16 U.S.C. § 796(17)(A)(ii).

⁷ 82 FERC ¶ 61,116 (1998).

⁸ *Id.* at 61,421 n.25.

⁹ See *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (emphasis in original).

¹⁰ *National Black Media Coalition v. F.C.C.*, 775 F.2d 342, 355 (D.C. Cir. 1985) (*NBMC*).

¹¹ *Hatch v. FERC*, 654 F.2d 825, 835 (D.C. Cir. 1981) (*Hatch*).

¹² *Manhattan Ctr. Studios, Inc., v. NLRB*, 452 F.3d 813, 816 (D.C. Cir. 2006).

Accordingly, the issues presented are: (i) whether the Commission’s decision to “throw[] overboard *Occidental*, a 40-year old precedent,”¹³ and its logical and industry-accepted focus on a generator’s “send out” capacity and replace it with a “component-by-component approach” is consistent with the underlying statute; (ii) whether the Order provides a “principled explanation for its change in direction”;¹⁴ and (iii) whether the Commission erred in failing to limit its change to apply only prospectively, given the reasonable reliance of the developers based on *Occidental*.

II. SPECIFICATIONS OF ERROR

1. The Commission erred by concluding, with no reasoned explanation, that its 40-years of consistent precedent and interpretation should now be abandoned and that the megawatts that a facility can produce and “send out” to the utility grid is not its “power production capacity” within the meaning of Section 3(17)(A) of the FPA, 16 U.S.C. § 796(17)(A), and Section 292.204(a) of the Commission’s implementing rules.

2. The Commission erred by failing to provide a reasoned explanation as to why the capability of an individual component of generating facility should be used to determine its power production capacity, where every utility industry standard measures capacity as the MW that the facility as a whole can actually produce.

3. The Commission erred by measuring the power production capacity of the Broadview Facility on the direct current rating of the solar array and ignoring the fact that it takes 1.25-1.4 MW of d/c solar panel to produce 1 MW of ac power that can be exported from the facility to the utility grid. Since, as the U.S. Energy Information Agency (“EIA”) has recognized, solar photovoltaic facilities have a dc/ac ration of from 1.25 to 1.4 dc/ac, under the

¹³ Order, Glick, Commissioner, *dissenting*, at P 6 (Glick Dissent).

¹⁴ *Id.* at P 5.

FERC's "component" approach, solar QFs that have a maximum solar array component capacity of 80 MW can only produce and send out 64-57 MW of power. The Commission's new interpretation means that the Order has reduced the 80 MW limit that Congress established in Section 3(17)(A) of the FPA, 16 U.S.C. § 796(17)(A), for solar QFs by 25%-40%.

4. The Commission erred by failing to cite *any* industry source that supports its conclusion that the power production capacity of a solar facility should be based on the direct current capacity of its solar array and should ignore the reduction in capacity that results from the necessary requirement to employ inverters to convert the electricity produced by the solar array to direct current, so that it can be exported to the alternating current electric power grid in the U.S.

5. The Commission erred by failing to recognize the difference between "capacity" and "energy," and that peak loads can only be served by power production capacity. When utilities, RTOs¹⁵ and federal agencies such as the U.S. Department of Energy and FERC measure "capacity," they are referring to a facility's ability to meet instantaneous load.¹⁶ That is why the capability of the solar arrays that comprise part of the Broadview Facility is irrelevant – the capability of the Broadview facility to meet instantaneous load does not and cannot exceed 80 MW. That is why its interconnection agreement with NorthWestern Corporation ("NorthWestern") is limited to 80 MW and why NorthWestern's interconnection studies stated that the "Project will be 80 MW based on the max output of the inverters."¹⁷ NorthWestern accordingly would not and could not rely on the Broadview facility to provide more than 80 MW

¹⁵ The New England Independent Transmission Operator defines capacity as "the maximum output an electricity generator can physically produce, measured in megawatts (MW)." *Capacity vs Energy: A Primer*, ISO NEW ENGLAND, <https://www.iso-ne.com/about/what-we-do/in-depth/capacity-vs-energy-primer> (last visited Sept. 10, 2020).

¹⁶ The EIA Glossary defines "generator capacity" as "[t]he maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, adjusted for ambient conditions. GLOSSARY, Generator Cap, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/tools/glossary/index.php?id=G#gen_cap.

¹⁷ Glick Dissent at P 2 n.4.

to serve NorthWestern's customer load, and no utility purchaser or RTO would plan for the Broadview facility to provide more than 80 MW of power to meet customer demand based on the fact that a component of the Broadview facility can produce that amount of direct current power.

6. The Commission erred by adopting a definition of "power production capacity" which contradicts the U.S. Energy Information Administration's ("EIA") definition of "capacity." To determine capacity, industry and government look at performance tests, which measure the actual "sent-out" capability of a generating facility – not the capacity of a component. According to the EIA, "electricity generation capacity" is the maximum electric output an electricity generator can produce under specific conditions. Net summer electricity generation capacity and net winter electricity generation capacity are typically determined by a performance test and indicate the maximum electricity load a generator can support at the point of interconnection with the electricity transmission and distribution system during the respective season.¹⁸ Consistent with its interconnection agreement with NorthWestern, the maximum electricity load the Broadview facility could support at the point of interconnection is 80 MW. To determine capacity, industry and government look at performance tests, which measure the actual "sent-out" capability of a generating facility – not the capacity of a component.¹⁹

7. The Commission erred by adopting a definition of "power production capacity" which contracts the definition used by the EIA and which applies to Form EIA-860. The data collected on Form EIA-860 "are used to monitor the current status and trends of the electric

¹⁸ FREQUENTLY ASKED QUESTIONS (FAQS), *What is the difference between electricity generation capacity and electricity generation?*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/tools/faqs/faq.php?id=101&t=3> (last updated Feb. 4, 2020).

¹⁹ Net summer generation capacity is determined by performance tests during peak demand between June 1 – September 30; Net winter generation capacity is determined by performance tests during peak demand between December 1 – February 28. *What is Generation Capacity*, U.S. DEPT. OF ENERGY - OFFICE OF NUCLEAR ENERGY (May 1, 2020), <https://www.energy.gov/ne/articles/what-generation-capacity>.

power industry and to evaluate the future of the industry.” It would lead to skewed results if Form EIA-860 or the EIA were to use an incorrect or illogical method to determine generation capacity. The EIA defines “generation capacity” as “[t]he maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, adjusted for ambient conditions.”²⁰ The maximum output that the Broadview generating equipment can supply to NorthWestern system load is 80 MW. The Commission’s focus on the direct current capability of one component of the facility -- the solar array -- which cannot be supplied to load, is plainly misguided and unsupportable.

8. The Commission erred by concluding, with no supporting evidence, that the fact that inverters used by a solar array to convert direct current power to alternating current power are “output-limiting devices” somehow makes them different from the inherent output limitation associated with the limitations on MW that occur based on the lowest-capacity component of any other type of generation. As summarized by a U.S. utility’s Facility Rating Methodology, “a facility is considered a system of equipment and major components that must be integrated and operated together. *The facility rating shall equal the most limiting applicable equipment rating of the individual equipment or major components that comprise the facility.*”²¹ That the inverters, as opposed to any other component, limit the output of the entire facility is irrelevant to determining the rating of the facility.

9. The Commission erred by ignoring the definition of a solar generation facility used by the entity responsible for maintaining reliability of the power system in the U.S. – the North American Electric Reliability Corporation (“NERC”) – which, as Commissioner Glick

²⁰ GLOSSARY, *Generator Cap*, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/tools/glossary/index.php?id=G#gen_cap (last visited Sept. 10, 2020).

²¹ Rochester Public Utilities Facility Ratings methodology for Transmission, Substation, & Generation Equipment, Section R1.1, prepared to comply with the NERC Facilities Ratings methodology requirements of standard FAC-008-1 (revised Oct. 19, 2009) (emphasis added).

points out in his dissent, defines “solar ‘power producing resources’ as, together, the photovoltaic panels *and* the associated inverters,”²² and instead taking the position that the solar facility is just the solar array and the inverters are not part of the generating facility.

10. The Commission erred by failing to explain how the solar generation, comprised of solar panels and inverters, differs from conventional generation that might be employed by a biomass or waste energy small power production facility, where the developer found it economic to select a boiler that produces enough steam to produce 100 MW but coupled it with a turbine/generator that can only produce 80 MW. The Commission failed to explain why, in this scenario, the turbine/generator is not also an “output-limiting device” such that the power production capacity of the biomass or waste facility should be 100 MW.

11. The Commission erred by incorrectly distinguishing inverters from other generation facility components. The Commission’s characterization of inverters as imposing a “conversion limit, not a limit on the facility’s maximum power production capacity” is simply circular reasoning that assumes, rather than supports, the conclusion. Under the above-referenced industry standards, and as stated by Broadview in its application, the inverters are a necessary and integral part of a solar facility and not an artificial device that is added to a solar facility to curtail its output.²³

12. The Commission erred by failing to understand or rationally address the fact that inverters perform a necessary function by converting direct current produced by a solar facility to alternating current, which must be done in order for power to be injected into the U.S. utility

²² Glick Dissent at P 3 n.9 (citing N. Am. Elec. Reliability Corp., *Bulk Electric System Definition Reference Document* at 18-20 (Aug. 2018), available at www.nerc.com/pa/Stand/2018%20Bulk%20Electric%20System%20Definition%20Reference/BES_Reference_Doc_08_08_2018_Clean_for_Posting.pdf).

²³ See Broadview Solar, LLC, *Motion for Leave to Answer and Answer*, Docket No. QF17-454-004, at 9 (filed Oct. 17, 2019) (stating that “there is nothing ‘artificial’ about measuring the power production capacity of the Facility as the net output of its physical inverters” because “the inverters are ... an integral component of the Facility.”).

transmission grid, which operates using alternating current at a synchronized frequency of 60 Hertz.

13. The Commission erred by holding that Broadview incorrectly filled out Form No. 556 by entering 82.5 MW for line 7a, which specifies “[t]he maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions.” The maximum gross power production capacity of the Broadview facility is 82.5 MW and accordingly Broadview correctly filled out line 7a of Form No. 556.

14. The Commission erred by failing to provide a “principled explanation for its change of direction.”²⁴ The Commission’s “failure to . . . explain its basic change in the interpretation of a statutory standard to be applied to conduct of the public undermines the integrity of the administrative process.”²⁵

15. The Commission erred by characterizing the Order as “prospective.”²⁶ As the courts have consistently held, a prospective change in policy or interpretation is one that does not apply to the subject of the proceeding, but rather will only apply to future cases.²⁷ By applying its newly-announced approach and abandoning its 40-year consistent approach to determining a facility’s power production capacity to the applicant in this proceeding, the Commission engaged in a retroactive, rather than a prospective, change in its interpretation of the statute and its own regulations.

²⁴ *NBMC* at 355.

²⁵ *Hatch* at 835.

²⁶ Order at P 27.

²⁷ See, e.g., *Retail, Wholesale and Dept. Store Union, AFL-CIO v. N.L.R.B.*, 466 F.2d 380 (D.C. Cir. 1972) (*Retail, Wholesale*).

16. The Commission erred by failing apply the required five-part test for an agency to engage in a retroactive change in its interpretation of law.²⁸ Under that test, even if the change in interpretation were permitted, it should only have been applied prospectively and not to Broadview, which relied on the “integrity of the administrative process”²⁹ to invest significant amounts of development effort and funds to a facility with a power production capacity that does not exceed 80 MW as measured pursuant to the agency’s four-decade long history of decisions and precedent.

17. The Commission erred by failing to adequately address the disruption that will be caused by the Order to existing QFs whose capacity, as properly measured by the send-out rule under *Occidental*, is less than one MW but whose solar arrays or other components have a capacity in excess of one MW. Pursuant to Section 292.203(d) of the Commission’s regulations,³⁰ these QFs are exempted from having to file a Form 556, and accordingly will not be grandfathered under the Commission’s approach. The Commission erred by adopting a new policy and interpretation in an adjudicatory proceeding, rather than providing notice and affording the affected QF industry participants to provide comments on the Commission’s proposed new interpretation and enforcement policies.

III. REQUEST FOR REHEARING

The internet post by the U.S. Government’s Energy Information Administration (“EIA”) titled “Solar plants typically install more panel capacity relative to their inverter capacity” explains that the capacity of the solar *panels* in a solar photovoltaic system “is often reported in direct current (DC), while *operating capacity* in the United States is reported as it is delivered to

²⁸ *Id.*

²⁹ See *Hatch* at 835.

³⁰ 18 C.F.R. § 292.203(d).

the grid in alternating current (AC).³¹ The posting explains that there is a significant difference between the direct current capacity of the panels, in comparison to the capacity as delivered to the grid in AC, for several reasons:

The output of a solar PV system is dependent on the availability of the sun. Because the output of panels may only reach peak DC capacity a few hours out of the year, it may not be cost effective to size an AC inverter to capture that full output. PV panels' output not only changes over the course of the year, when the sun is at different altitudes in the sky, but output also declines as solar PV cell/module performance degrades over time. PV system designers also take these considerations into account and size the inverter to be large enough to capture most of the output of the system over its lifetime, but not so large that the incremental increase in inverter capacity becomes uneconomic.³²

For these reasons, the EIA “reports all electricity capacity data [of solar PV installations] in terms of the systems’ AC capacity because electricity operations and sales in the United States are generally conducted on an AC basis.”³³ Measuring the capacity of a solar PV system based on the AC capacity it delivers to the grid, not surprisingly, is consistent with the approach taken by FERC and the U.S. Department of Energy when determining generation capacity in general and by FERC, for the last four decades, when it determines the power production capacity of small power production QFs. For example, the EIA’s definition of “electricity generation capacity” is “the maximum electric output an electricity generator can produce under specific conditions. Net summer electricity generation capacity and net winter electricity generation capacity are typically determined by a performance test and indicate “[t]he maximum output...that generating equipment can supply to system load, as demonstrated by a multi-hour test,” during a specified summer or winter period.³⁴ Without explanation the Commission’s new

³¹ TODAY IN ENERGY, *Solar plants typically install more panel capacity relative to their inverter capacity*, U.S. ENERGY INFO. ADMIN. (Mar. 16, 2018), <https://www.eia.gov/todayinenergy/detail.php?id=35372> (emphasis added) (attached as Exhibit 1).

³² *Id.*

³³ *Id.*

³⁴ U.S. ENERGY INFO ADMIN, Glossary, <https://www.eia.gov/tools/glossary/index.php?id=N>.

interpretation of Section 3(17)(A) of the FPA ignores this approach, instead measuring capacity based on the size of a component and ignoring the fact that the facility of which the component is a part cannot produce or deliver that amount of power production capacity.

The EIA defines “generation capacity” as “[t]he maximum output, commonly expressed in megawatts (MW), *that generating equipment can supply to system load*, adjusted for ambient conditions.”³⁵ This definition is used on the Form EIA-860, which is used to collect specific information and data about existing and planned generators at generation projects with at least one MW of nameplate capacity. Since the data collected on Form EIA-860 “are used to monitor the current status and trends of the electric power industry and to evaluate the future of the industry,”³⁶ it would lead to skewed results if Form EIA-860 or the EIA were to use an incorrect or illogical method to determine generation capacity.³⁷ Moreover, the Commission expressly adopted the EIA definition of “seasonal capacity” as reported on Form EIA-860 for purposes of determining the amount of capacity that a seller seeking market-based rate authorization owns or controls.³⁸ Seasonal capacity, which is based on the actual measured output of a generator under specified conditions, is based is measured in alternating current (AC), and as the Commission noted in Order No. 697, “the use of seasonal capacity ratings more accurately reflects the seasonal real power capability and is not inconsistent with industry standards....”³⁹, noting

³⁵ *Id*; <https://www.eia.gov/tools/glossary/index.php?id=G>.

³⁶ U.S. ENERGY INFO. ADMIN., Form EIA-860 Instruction Annual Electric Generator Report, Purpose, (OMB No. 1905-0129, expires May 31, 2023).

³⁷ As described by ISO-NE, “[t]he capacity of these resources together forms the capacity for the power system. ISO New England is required by federal reliability standards to ensure the region has enough resources to meet a minimum total *system* capacity level (the Installed Capacity Requirement).” *Capacity vs Energy: A Primer*, ISO NEW ENGLAND, <https://www.iso-ne.com/about/what-we-do/in-depth/capacity-vs-energy-primer> (last visited Sept. 10, 2020). If inaccurate and overstated generation capacity amounts are reported, the aggregate capacity of an RTO’s resources will not be sufficient to meet system demand.

³⁸ 119 FERC ¶ 61,295, P 343 (1998) (Order No. 697).

³⁹ *Id.* at P 339.

comments that “seasonal capacity is a more accurate representation of *actual output*.⁴⁰ In contrast to this standard utility industry approach, under the new interpretation adopted in the Order, the power production capacity of a solar QF with a solar array of, for example, 120 MW DC but that can only produce in AC and which has a seasonal rating of 80 MW would be deemed be 120 MW and therefore to exceed the 80 MW limitation in Section 3(17)(A) of the FPA, 16 U.S.C. § 796(17)(A). Such an approach is completely inconsistent with the facts that the “real power capability” of the Broadview Facility is only 80 MW. Moreover, a utility that sought to serve its load with the non-existent 120 MW would experience a shortfall.

Required by Congress to adopt regulations implementing Section 3(17)(A) of the FPA, which defines a “small power production facility” a facility which “(i) produces electric energy solely by the use, as a primary energy source, of biomass, waste, renewable resources, geothermal resources, or any combination thereof; and (ii) has a power production capacity which . . . is not greater than 80 megawatts,”⁴¹ the Commission in 1980 adopted a rule which mirrored the statutory language.⁴² As described in Broadview’s Application for recertification of QF status in this proceeding,⁴³ in 1981, the Commission’s the first year of implementing FPA Section 3(17)(A), 16 U.S.C. § 796(17)(A), and its implementing regulations, the Commission recognized that a facility’s power production capacity “is not necessarily determined by the nominal rating of even a key component of the facility.”⁴⁴ The Commission stated that “while economy dictates that a large facility be built so that all of its components have nearly the same

⁴⁰ *Id.* at P 340 (emphasis added). The Commission noted that “it did not think the use of [seasonal ratings] will materially impact results,” in comparison to the use of nameplate capacity. *Id.* at P 339. For purposes of asset appendices and market power studies, the Commission requires solar photovoltaic facilities to use nameplate capacity. 153 FERC ¶ 61,065, P 102 (2015) (Order No. 816). The nameplate capacity of the Broadview Facility is 80 MW.

⁴¹ 16 U.S.C. § 796(17)(A).

⁴² 18 C.F.R. § 292.204(a)(1) (“Maximum size. . . . [T]he power production of a capacity for which certification [as a qualifying small power production facility] is sought . . . may not exceed 80 megawatts.”).

⁴³ Broadview Application at 3.

⁴⁴ Occidental at 61,444.

operating limits, thus minimizing the costs of unutilized component capabilities, it is not uncommon for smaller facilities to find it most economic to employ commercially available components some of which have individual capabilities significantly exceeding the overall facility capabilities.”⁴⁵ Accordingly, the Commission determined that the power production capacity of a QF is the “net output” of the facility – *i.e.*, its send out after subtraction of the power used to operate auxiliary equipment necessary for power generation.⁴⁶ The Commission recognized that the capacity of individual components is simply not relevant to the determination of a facility’s capacity – instead finding, consistent with utility industry practice, that what matters is the amount of capacity that the facility can provide to the utility grid.

In addition, beginning with its 1981 *Occidental* decision and continuing until the Order, the Commission consistently rejected the proposition that a QF developer is obligated to construct a facility that produces the maximum capacity that might be available. As Broadview explained in its application for certification, in *Occidental* the Commission rejected claims that QF status should be denied because the geothermal resource could provide more than 80 MW of capacity, holding that “the statute and the rules do not require that a facility be sized to achieve the maximum output of an energy resource.”⁴⁷ In contrast, and without explanation, the Commission, ignoring its “components don’t determine capacity” and “intent to size to meet the 80 MW ceiling is permitted” precedents, focused only on its precedent involving incidental or occasional exceedance of the 80 MW threshold and stated that in the instant case there is a distinction because the facility is “purposely designed with a 160 MW solar array.”⁴⁸ The Order contains no explanation as to how “purposely” oversizing one component is permissible for the

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ Application at p. 4 (citing *Occidental* at 61,445).

⁴⁸ Order at P 21.

geothermal facility in *Occidental* but not for the solar facility in the instant case, where in both cases the facility cannot produce more than 80 MW.

Similarly, as Commissioner Glick's dissent points out, the Commission's 1987 *Malacha* decision⁴⁹ found that the "electric power production capacity of the facility *is the capacity that the electric power production equipment delivers to the point of interconnection with the purchasing electric utility's transmission system.*"⁵⁰ These two basic understandings and interpretations – that the capacity of a power generation facility is based on the actual capacity that it provides to the utility grid, and that since only the entire facility, as opposed to an individual facility component, can provide capacity to the grid – are consistent with and reflected in the NERC definition of solar "power producing resources" cited by Commissioner Glick. The NERC definition refers to the term "facility" as "indicat[ing] that QF status should turn on the actual power production capacity of the resource as a whole, not the capacity of its largest individual component part."⁵¹ NERC defines "solar 'power producing resources' as, together, the photovoltaic panels *and* the associated inverters."⁵² Since the solar facility is comprised of both of these components, if the theoretical capacity of one component exceeds that of the other, such that only the capacity of the limiting component can be generated and provided to the grid, then the limiting component of the facility sets the facility's capacity.

Putting these two concepts together, (i) only the entire facility, as opposed to an individual opponent, can generate and provide capacity to the grid, and (ii) the U.S. utility industry and the U.S. government, in regulating the utility industry, determine the capacity of

⁴⁹ 41 FERC ¶ 61,350 (1987).

⁵⁰ Glick Dissent at P 4 n.11 (citing *Malacha*) (emphasis added).

⁵¹ *Id.* at P 3.

⁵² *Id.* at P 3 n.9 (citing N. Am. Elec. Reliability Corp., *Bulk Electric System Definition Reference Document* at 18-20 (Aug. 2018), available at www.nerc.com/pa/Stand/2018%20Bulk%20Electric%20System%20Definition%20Reference/BES_Reference_Doc_08_08_2018_Clean_for_Posting.pdf).

generation based on the amount of capacity that the facility actually provides to the grid. This of course makes perfect sense when the purpose of determining the capacity of generation in this context is understood. As the U.S. Government Accounting Office stated:

...grid operators constantly balance the generation and consumption of electricity to reliably delivery electricity to customers as needed. To accomplish this, grid operators must have adequate resources available to meet the highest levels of customers' electricity needs. These resources include power plants with sufficient generating capacity – the maximum capability of a power plant to generate electricity, typically measured in megawatts (MW).⁵³

The resources that a grid operator relies on to serve load must be capable of actually providing the capacity at which they are rated – otherwise there will be inadequate capacity to meet load, and reliability will not be maintained. If the capacity of a generating facility is based on the rating of a component, but the amount of capacity that the facility as a whole can provide to the grid is less, grid operators cannot perform their obligation of balancing generation and load.

In Order No. 697, the Commission adopted its proposal to permit sellers, in their asset appendices, to use seasonal capacity instead of nameplate. The Commission stated that “it believed the use of seasonal capacity ratings more accurately reflects the seasonal real power capability and is not inconsistent with industry standards....”⁵⁴ Discussing comments submitted on its proposal, the Commission observed that the reason most commonly cited for use of seasonal capacity “is that seasonal capacity is a more accurate representation of actual output.”⁵⁵ In adopting its proposal, the Commission stated “[w]e also note and adopt the Energy Information (EIA) definition of seasonal capacity as it is reported on Form EIA-860, Schedule 3, Part B, Line 2, which provides that the seasonal capacity is the ‘net summer or winter

⁵³ U.S. GOV'T ACCOUNTABILITY OFFICE, ELECTRICITY MARKETS, FOUR REGIONS USE CAPACITY MARKETS TO HELP ENSURE ADEQUATE RESOURCES, BUT FERC HAS NOT FULLY ASSESSED THEIR PERFORMANCE 6 (GAO-18-131, Dec. 7, 2017).

⁵⁴ Order No. 697 at P 339.

⁵⁵ *Id.* at P 340

capacity.”⁵⁶ In other words, FERC encouraged use of the seasonal rating approach, which measures the actual output of generation, and expressly adopted the Form EIA-860 definition of seasonal capacity – which is identical to the “send-out” approach adopted by the Commission in 1981 in used continuously until issuance of the Order. Nowhere does Order No. 697 or Form EIA-860 refer to or permit generators to report capacity based on the rating of an individual component of a generation facility.

Relying on this long-established Commission precedent and interpretation of how the Commission determines a facility’s power production capacity, Broadview has expended significant time and funds to develop its facility. These efforts included negotiating and entering into an interconnection agreement with NorthWestern, pursuant to which NorthWestern will provide 80 MW of interconnection service, based on the interconnection studies NorthWestern performed, which, as Commissioner Glick points out, provide that the “Project will be 80 MW based on the max output of the inverters.”⁵⁷ Broadview designed the combined solar plus storage facility to include a solar array that could (1) provide DC charging power to the battery energy storage system (“BESS”) to be internally stored by the BESS for later export to the grid, and, (2) in accordance with the above-cited solar PV industry standards, accounting for dc/ac conversion losses, optimize energy production during hours when there is insufficient solar insolation for the solar panels to operate at their maximum capacity.⁵⁸

As Commissioner Glick explained, adding additional solar panels and the BESS “increases the capacity factor of the facility, not the facility’s actual power production

⁵⁶ *Id.* at P 343.

⁵⁷ Glick Dissent at P 2 n.4.

⁵⁸ See Broadview Application, Affidavit of Lloyd Baden Pasley at Paragraph 11. As Mr. Pasley explains, the facility design enables it to achieve a capacity factor of 40 percent, rather than the 25-30 percent capacity factor typically achieved by solar photovoltaic generation.

capacity.”⁵⁹ Storing DC solar energy in the BESS for subsequent conversion to AC power and export to the utility grid is no different from an 80 MW biomass facility’s processing and storing wood pellets for use when wood fuel is not available to produce sufficient generation to achieve 80 MW, or an 80 MW hydroelectric QF project’s storing water for generation when there otherwise would be insufficient river flow to produce 80 MW from its turbines. Since capacity is ability to meet peak load, what matters is how much capacity the facility can provide. Measuring capacity based on the theoretical but unusable capacity of individual makes no sense, since using larger components when the capacity of the facility as whole does not increase does not increase the facility’s *power production capacity*.

Nevertheless, without as much as a sentence recognizing that, for example, it is standard solar PV industry practice to size the solar arrays of a project to be significantly larger than the AC send-out capacity, the Order asserts that the Commission and the industry have gotten it wrong for 40 years, and that the “plain language” of PURPA is inconsistent with defining generation capacity based on its “output” or “send out.”⁶⁰ The Order contains no explanation of how the method for measuring generation capacity that is the same one used by the EIA and NERC, which the Commission adopted for purposes of its own Order No. 697, is suddenly “inconsistent with the 80 MW ‘power production capacity’ limitation in PURPA for small power production QFs, based on our reading of the statute and regulations.” The Order is entirely lacking in a “principled explanation for its change of direction”⁶¹ or an explanation is to why a facility that can produce only 80 MW of power for export to the grid should be deemed to have a higher capacity based on the capacity of a component that cannot function without another

⁵⁹ Glick dissent at P 2.

⁶⁰ Order at P 23.

⁶¹ NBMC at 355.

component that, in converting the DC power produced by the solar array to AC power, limits output to 80 MW.

Also not addressed in the Order is the fact, for example, that under the Commission's new "plain meaning" test, a wind energy facility with blades that could produce more than 80 MW, but which can only produce 80 MW based on the turbines' generators, would no longer qualify. Similarly, a biomass facility developer that was able to purchase an off-the-shelf boiler that can produce steam to generate 100 MW, but which uses an 80 MW turbine/generator set, would no longer qualify since the theoretical capacity of the larger component is what matters under the Order's "plain meaning" test.

The Commission's attempt to characterize the Broadview Facility's dc/ac inverters as an artificial output limiting device is equally flawed. As Broadview pointed out (and the Order acknowledges but fails to address), an inverter is an integral component of a solar PV facility, and is no different from the boiler or generator of a biomass or waste energy facility, which may similarly impose a "send out" limit on the entire facility. Nowhere does the Order address the fact that NERC, the organization in charge of maintaining reliability of the power grid in the U.S. and Canada, explicitly includes inverters, along with photovoltaic panels, as comprising the solar generation resource. Nowhere does the Order respond to the fundamental point made by the EIA, that since the U.S. power system operates in alternating current, it is necessary to convert direct current power produced by a solar PV array into alternating current to export the power to the grid. As a result, the Order fails to address why it makes sense to focus on the solar array component's direct current capacity, rather than the alternating current capacity that the facility as a whole can actually produce and provide to the grid.

In order to withstand judicial review, the Commission must engage in reasoned decision making,⁶² and its decision may not be arbitrary and capricious. Under this standard, “an agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.”⁶³ The agency must “engage the arguments raised before it,”⁶⁴ and an agency fails to satisfy this requirement if it fails to “respond meaningfully to objections raised by a party.”⁶⁵ As Commissioner Glick observes, here “[t]he Commission concludes that Broadview’s power production capacity exceed the 80-MW ceiling for qualifying as a QF based entirely on the fact that its solar array is rated at 160 MW. But the Commission makes no effort explain why it is appropriate to determine a qualifying *facility*’s power production capacity based on that facility’s component parts rather than looking to the power production capacity as a whole.”⁶⁶

Similarly, the Order provides no explanation for the Commission’s revelation that its prior holding in *Occidental* that “‘the power production capacity’ of a facility is ‘the maximum net output of the facility,’ which is ‘its send-out’ is not consistent with the 80 MW ‘power production capacity’ limit expressly specified by the statute and regulations.” language of PURPA.”⁶⁷ Rather than representing reasoned decision making, the Commission’s approach is

⁶² See, e.g., *FPL Energy Marcus Hook, L.P. v. FERC*, 430 F.3d 441, 448-49 (D.C. Cir. 2005) (“FERC’s failure to provide an intelligible explanation for adopting its new rationale amounts to a failure to engage in reasoned decisionmaking. See *Pub. Utils. Comm’n of Cal. v. FERC*, 988 F.2d 154, 167 (D.C. Cir.1993) (agency determination must be result of reasoned decisionmaking).”).

⁶³ *Sierra Club v Salazar*, 177 F.Supp.3d 512, 531 (2016) (*Salazar*) (citing *Tripoli Rocketry Ass’n v. ATF*, 437 F.3d 75, 81 (D.C. Cir. 2006)).

⁶⁴ *Del. Dep’t of Nat. Res. & Envtl. Control v. EPA*, 785 F.3d 1, 11 (D.C. Cir. 2015) (citation and internal quotation marks omitted).

⁶⁵ *BNSF Ry. Co. v. Surface Transp. Bd.*, 741 F.3d 163, 168 (D.C. Cir. 1975) (citation and internal quotation marks omitted).

⁶⁶ Glick Dissent at P 5.

⁶⁷ Order at P 23.

mere *ipse dixit*.⁶⁸ As Commissioner Glick concludes, “[t]he Commission’s failure to wrestle with those arguments is arbitrary and capricious.”⁶⁹

As the Supreme Court has held, when, as here, an agency deviates from a past position, it must both display an “awareness that it *is* changing position” and offer “good reasons” for the changed position.⁷⁰ Indeed, one of “the core tenets of reasoned decision-making is that ‘an agency [when] changing its course . . . is obligated to supply a reasoned analysis for the change.’”⁷¹ In addition, in explaining a change in policy, “an agency must also be cognizant that longstanding policies may have engendered serious reliance interests that must be taken into account.”⁷² An agency cannot turn “its back on its own precedent and policy without reasoned explanation.”⁷³ It must “give a reasoned justification for departing from its precedent.”⁷⁴ And if “a party makes a significant showing that analogous cases have been decided differently, the agency must do more than simply ignore that argument.”⁷⁵ When, as here, an agency fails to explain its deviation from established precedent, “its decision will be vacated as arbitrary and capricious.”⁷⁶

The D.C. Circuit has held that these essential administrative law principles fully apply to FERC decisions. In *Hatch*, the Court ruled that the Commission “must provide a reasoned explanation for any failure to adhere to its own precedents.”⁷⁷ The Court explained, an “agency changing its course must supply a reasoned analysis indicating that prior policies and standards

⁶⁸ “[S]omething asserted but not proved.” BLACK’S LAW DICTIONARY 905 (9th ed. 2009); *see, e.g.*, *U.S. v. Alabama Power Co.*, 730 F.3d 1278 n.6 (11th Cir. 2013).

⁶⁹ Glick Dissent at P 5.

⁷⁰ *See FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (emphasis in original).

⁷¹ *Salazar* at 532-33 (citing *Republic Airline Inc. v. U.S. Dep’t of Transp.*, 669 F.3d 296, 299 (D.C. Cir. 2012) (quoting *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 42 (1983))).

⁷² *Encino Motocars, LLC v. Navarro, et al.*, 136 S.Ct. 2117, 2126 (2016).

⁷³ *Dupuy v. NLRB*, 806 F.3d 556, 563 (D.C. Cir. 2015); *accord ABM Onsite Services v. NLRB*, 849 F.3d 1137, 1146 (2017).

⁷⁴ *E.I. Du Pont de Nemours & Co. v. NLRB*, 682 F.3d 65, 70 (D.C. Cir. 2012).

⁷⁵ *LeMoyne-Owen Coll. v. NLRB*, 357 F.3d 55, 61 (D.C. Cir. 2004).

⁷⁶ *Manhattan Ctr. Studios, Inc. v. NLRB*, 452 F.3d 813, 816 (D.C. Cir. 2006).

⁷⁷ 654 F.2d at 834.

are being deliberately changed, not casually ignored, and if an agency glosses over or swerves from prior precedents without discussion it may cross the line from tolerably terse to intolerably mute.”⁷⁸ The Court noted that these are not just procedural niceties. Rather, FERC’s failure to adequately explain its reasoning for its “change in the interpretation of a statutory standard to be applied to conduct of the public undermines the integrity of the administrative process.”⁷⁹

Here, the Order violated those essential rules of administrative law. The Order provided that, after 40 years of focus on the amount of power that a facility can actually produce and supply to the grid, simply announcing that the “plain language” in the statutory phrase “power production capacity” should instead be based on the size of a facility component. No explanation for this rejection, or good reasons for doing so, were provided. This violated the basic standards set forth by the Supreme Court and D.C. Circuit.

Finally, the Commission chose to overturn its 40-year precedent and adopt a new interpretation of the statute and the Commission’s rules in an adjudication, rather than a notice and comment rulemaking proceeding. While an agency is permitted to adopt new policies in an adjudicatory proceeding, under the criteria cited by the D.C. Circuit in the seminal *Retail, Wholesale* decision,⁸⁰ when considering whether it can or should apply a new policy or interpretation retroactively, the agency must consider:

(1) whether the particular case is one of first impression, (2) whether the new rule represents an abrupt departure from well established practice or merely attempts to fill a void in an unsettled area of law, (3) the extent to which the party against whom the new rule is applied relied on the former rule, (4) the degree of the burden which a retroactive order imposes on a party, and (5) the statutory interest in applying a new rule despite the reliance of a party on the old standard.⁸¹

⁷⁸ *Id.* (quoting *Greater Boston Television Corp. v. FCC*, 444 F.2d 841, 852 (D.C. Cir. 1970)) (internal citations omitted).

⁷⁹ *Id.* at 835.

⁸⁰ *Retail, Wholesale* 380.

⁸¹ *Retail, Wholesale* at 390; *Clark-Cowlitz Joint Operating Agency v. FERC*, 826 F.2d 1074, 1081 (D.C. Cir. 1987) (*en banc*) (quoting *Retail, Wholesale* at 390).

Here, regarding (1) and (2), this is obviously not a case of first impression, and the Commission acknowledges that its new interpretation of the statute and its regulations is an abrupt departure⁸² from what Commissioner Glick accurately describes as “interpretations [that] have been settled policy for decades at this point.”⁸³ Far from filling a void in an unsettled area, the new policy expressly contradicts and overturns established Commission interpretation and policy, adhered to in many cases over 40 years. Regarding (3), in developing the Broadview Solar project, Broadview has expended hundreds of thousands of dollars and hundreds of hours of development effort, in reliance that the Commission would adhere to its precedent and policies – for example by negotiating an interconnection agreement with NorthWestern to provide 80 MW of interconnection service to its facility. As Commissioner Glick observes, NorthWestern’s interconnection studies reflected its understanding that the “send out” capacity of the generating facility would be 80 MW.⁸⁴

The burden imposed on Broadview Solar by this retroactive order is devastating. Broadview Solar’s power sale agreement requires that it be a QF – and so if the Broadview Solar facility is held not to be a QF it will lose this power sale agreement and the project will not be viable if it is not able to obtain the rates specified in the power sale agreement.

Finally, the Commission should not have applied its new interpretation to Broadview Solar despite Broadview Solar’s reasonable reliance on the prior established standard. The D.C. Circuit has held that a “new rule may be applied retroactively to the parties in an ongoing adjudication only if “the parties before the agency are given notice and an opportunity to offer evidence bearing on the new standard,” and if “the affected parties have not detrimentally relied

⁸² See Order at P 22-23.

⁸³ Glick Dissent at P 4.

⁸⁴ Id. P 2 n.4.

on the established legal regime.”⁸⁵ Here, the Order fails because Broadview Solar reasonable relied on the prior established standard that had existed for 40 years. There was no finding to the contrary made by the Commission.

Notably, the Commission exercised its discretion not to apply its new statutory interpretation retroactively to every other QF that has filed a Form No. 556, “even if [the QF] may have included adjustments for inverters or other output-limiting devices to calculate its maximum net power production as 80 MW or less . . .”⁸⁶ In contrast to the Broadview Solar facility, which similarly has filed a Form No. 556 that satisfies this criterion for “grandfathering,” FERC plainly has concluded that its statutory interest in calculating the capacity of QFs based on the size of their components, irrespective of their send-out capacity, is not sufficient to apply the new interpretation to the dozens, if not hundreds, of small power QFs in this category. For these reasons the Order fails to satisfy the *Retail, Wholesale* standards for retroactive application of its new interpretation to the applicant.

IV. **CONCLUSION**

Based on the above, the Commission must reverse the decision in the Order, restore the *Occidental* standard for determining a QF’s capacity, and find that the Broadview Solar I facility is a qualifying small power production facility. In the event that it does not do so, it must apply its new interpretation of Section 3(17)(A) of the FPA, 16 U.S.C. § 796(17)(A), prospectively only.

⁸⁵ *Consolidated Edison Co. of New York v. FERC*, 315 F.3d 316, 323 (D.C. Cir. 2003); see also *Clark-Cowlitz Joint Operating Agency v. FERC*, 826 F.2d 1074, 1081 (D.C. Cir. 1987) (en banc).

⁸⁶ Order at P 27.

Respectfully submitted,

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Dated: September 14, 2020

EXHIBIT 1



U.S. Energy Information
Administration

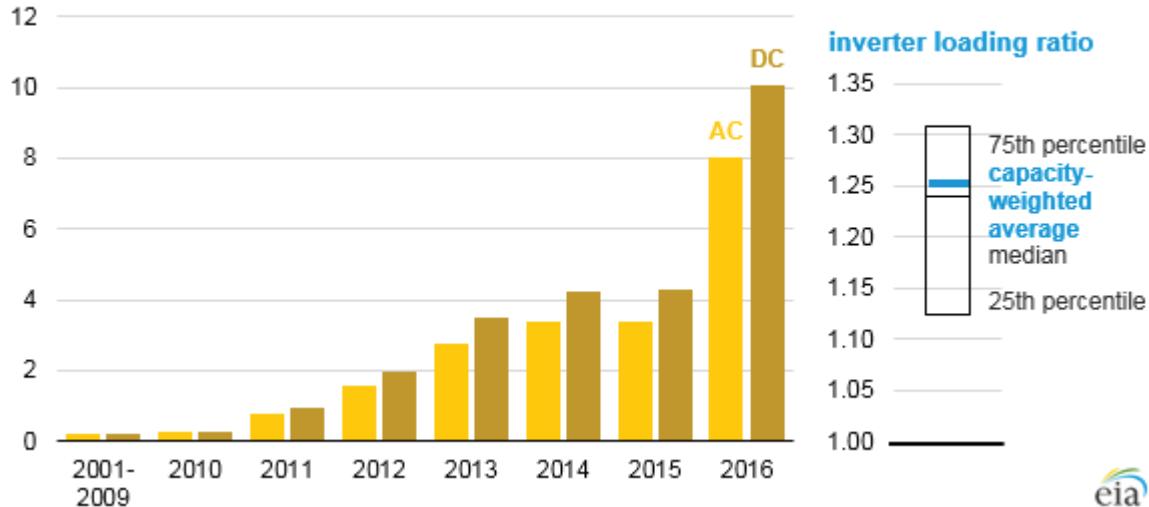
[Skip to sub-navigation](#)

Today in Energy

March 16, 2018

Solar plants typically install more panel capacity relative to their inverter capacity

Operating alternating and direct current utility-scale solar photovoltaic capacity additions
gigawatts



Source: U.S. Energy Information Administration, Form EIA-860, Electric Generators Report, 2016

A solar photovoltaic (PV) system's panel capacity is often reported in direct current (DC), while operating capacity in the United States is reported as it is delivered to the grid in alternating current (AC). For economic and engineering reasons, capacity values reported in DC typically are 10% to 30% higher than those reported in AC capacity. This ratio is often referred to as the inverter loading ratio (ILR).

At the end of 2016, the United States had 20.3 gigawatts (GW) AC of large-scale photovoltaic capacity in operation with a DC module rating of 25.4 GW, resulting in a capacity-weighted average ILR of 1.25. For individual systems, inverter loading ratios are usually between 1.13 and 1.30.

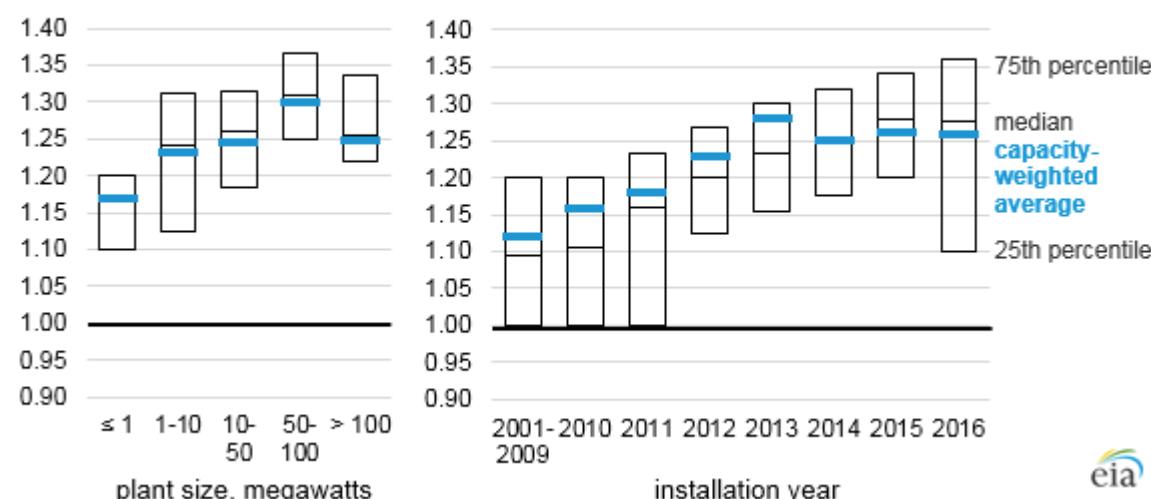
Developers of solar PV facilities intentionally over-build the DC capacity of their system relative to the AC output for a few reasons. The output of a solar PV system is dependent on the availability of the sun. Because the output of panels may only reach peak DC capacity a few hours out of the year, it may not be cost effective to size an AC inverter to capture that full output.

PV panels' output not only changes over the course of the year, when the sun is at [different altitudes](#) in the sky, but output also declines as solar [PV cell/module performance degrades over time](#). PV system designers also take these considerations into account and size the inverter to be large enough to capture most of the output of the system over its lifetime, but not so large that the incremental increase in inverter capacity becomes uneconomic.

Inverter loading ratios are higher for larger solar power plants. At the end of 2016, smaller plants—those one megawatt (MW) or less in size—had an average ILR of 1.17, while larger plants—those ranging from 50 MW to 100 MW—had an ILR of 1.30. As solar plants have gotten larger, inverter loading ratios have increased. In 2010, the average solar PV system had an ILR of 1.17. By 2016, the average was 1.26.

Solar photovoltaic inverter loading ratio by plant size and installation year (2001-2016)

inverter loading ratio (AC capacity to DC capacity)

**Source:** U.S. Energy Information Administration, Form EIA-860, Electric Generators Report, 2016**Note:** Includes 1,804 plants with a total of 20.3 GW of AC capacity and 25.4 GW of DC capacity.

Even though some PV installations are often discussed in terms of DC capacity—because DC capacity more accurately captures the rating of the panels—EIA reports all electricity capacity data in terms of the systems' AC capacity because electricity operations and sales in the United States are generally conducted on an AC basis.

This approach applies to not just capacity values but also to costs and operation characteristics. For example, the AC [capacity factor](#) for solar PV facilities operating in 2017 was 27%. If this value were estimated using DC capacity, the DC capacity factor would be about 22%. Similarly, the average [capital costs](#) for utility-scale solar PV facilities installed in 2015 were \$2.91 per watt in terms of AC capacity and about \$2.33 per watt in terms of the DC capacity of the PV modules.

Principal contributor: Cara Marcy

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, DC this 14th day of September 2020.

/s/ Adam Wenner

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**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar LLC

Docket Nos. QF17-545-004

**MOTION FOR LEAVE TO INTERVENE OUT OF TIME
BY THE SOLAR ENERGY INDUSTRIES ASSOCIATION**

Pursuant to Section 212 and 214 of the Federal Energy Regulatory Commission's ("FERC") or ("Commission") Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 214 (2020), the Solar Energy Industries Association ("SEIA") respectfully moves to intervene out of time in the above-captioned proceeding. As explained below, Good cause exists to grant SEIA's motion to intervene out-of-time.

I. SERVICE AND COMMUNICATIONS

Katherine Gensler Vice President, Regulatory Affairs Solar Energy Industries Association 1425 K Street, N.W., Suite 1000 Washington, D.C. 20005 kgensler@seia.org	Todd G. Glass Heather Curlee Wilson, Sonsini, Goodrich & Rosati, P.C. 701 Fifth Ave, Suite 5100 Seattle, WA 98104 (206) 883-2522 (206) 883-2699 (Fax) tglass@wsgr.com hcurlee@wsgr.com <i>Counsel to the Solar Energy Industries Association</i>
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II. MOTION TO INTERVENE OUT OF TIME

SEIA is the national trade association of the solar energy industry. As the voice of the industry, SEIA works to make solar a mainstream and significant energy source by expanding markets, reducing costs and increasing reliability, removing market barriers, and providing education on the benefits of solar energy. SEIA represents solar companies that own and operate a wide-variety of projects throughout the country, including solar installations at the transmission and distribution levels, as well as behind-the-meter solar at commercial, industrial, and residential host-sites. SEIA has actively advocated on behalf of solar small power production facilities (“Qualifying Facilities” or “QFs”) and these interests cannot be adequately represented by any other party. SEIA’s intervention and participation will serve the public interest.

As a matter of practice, SEIA generally does not intervene or participate in individualized proceedings for individual solar facilities unless the proceeding concerns broadly-applicable matters of national application. On September 11, 2019, when Broadview Solar filed an application to certify its individual QF proceeding, SEIA was actively involved and participating in the Commission’s technical conference docket on PURPA implementation matters, AD16-16. Shortly after Broadview’s Application was filed, and before the date for intervention and comments had passed, the Commission issued a Notice of Proposed Rulemaking where it proposed to revise regulations implementing Sections 201 and 210 of PURPA.¹ Given that the Commission did not include proposed revisions to its long-standing methodology for computing the maximum power

¹ *Qualifying Facility Rates and Requirements*, Order No. 872, 172 FERC ¶ 61,041 (July 16, 2020) (“Order No. 872”).

producing capability of a Qualifying Facility, SEIA had no indication that its intervention in Broadview Solar’s individual docket was necessary to protect the broad interests of the solar industry.

In its September 1 Order the Commission went far beyond issuing case-specific findings about the Qualifying Facility proposed by Broadview Solar and – without notice – overturned forty years of precedent about how to interpret a key provision of PURPA. This new interpretation affects not only Broadview Solar but extends to each and every Qualifying Facility that the Commission has, or will, certify. Given that the Commission opened a rulemaking docket after the Broadview Solar docket was initiated, and the Commission never provided any indication that it was considering revising its rules for determining the “power production capacity” of a Qualifying Facility,² SEIA had good cause for failing to file a motion to intervene in this proceeding prior to September 1, 2020.

The September 1, 2020 Order has already caused substantial harm to SEIA’s members that own, operate, and develop Qualifying Facilities. SEIA has no reason to dispute any of the individual facts in the record applicable to Broadview Solar and will accept the record as it stands at this point in time. No party will be prejudiced if SEIA’s late intervention is granted. Rather, SEIA’s participation is in the public interest. Good cause exists for the Commission to grant this Motion.

² See 16 U.S.C. § 796(17)(A) (defining a small power production facility as a qualifying technology with “a power production capacity which, together with any other facilities located at the same site (as determined by the Commission), is not greater than 80 megawatts”). FPA Section 3(17) was promulgated through Section 201 of PURPA.

Respectfully submitted,

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September 28, 2020

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of this pleading has been served this day upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated this 28th day of September, 2020 in Seattle, WA.

/s/ Heather Curlee

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar LLC

Docket Nos. QF17-454-004

**REQUEST FOR REHEARING AND CLARIFICATION
BY THE SOLAR ENERGY INDUSTRIES ASSOCIATION**

Pursuant to Section 313 of the Federal Power Act (“FPA”), 16 U.S.C. § 825l, and Rules 212 and 713 of the Federal Energy Regulatory Commission’s (“FERC”) or (“Commission”) Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 713 (2020), the Solar Energy Industries Association (“SEIA”)¹ respectfully submits this Request for Rehearing, and where appropriate, Clarification, of the Commission’s September 1, 2020 Order in the above-captioned proceeding (the “Broadview Order”).² The Commission’s reversal of well-understood and long-accepted precedent as to how to interpret the statutory phrase “power production capability” without appropriate notice and comment is arbitrary and capricious and inconsistent with the mandates of the Administrative Procedures Act (“APA”).³ As explained below, the Commission has replaced the well-understood and long-

¹ The comments contained in this filing represent the position of SEIA as a trade organization on behalf of the solar industry, but do not necessarily reflect the views of any particular member with respect to any issue.

² See *Broadview Solar, LLC*, 171 FERC ¶ 61,194 (2020) (“Broadview Order”). SEIA submitted a motion to intervene out of time in this docket on September 28, 2020. See 18 C.F.R. § 385.214 (providing for interventions out of time).

³ See 5 U.S.C. § 553 (providing for informal notice and comment procedures).

accepted *Occidental* precedent⁴ with a vague, confusing, and inconsistent rule that will not produce an accurate measure of the power production capability of a small power power production facility (“Qualifying Facility or “QF”).⁵ The Commission’s Broadview Order is arbitrary, capricious, and an abuse of discretion. SEIA seeks rehearing.

If the Commission does not grant rehearing, then SEIA seeks clarification that all “previously certified” Qualifying Facilities will not be exposed to a *Broadview* rule challenge upon recertification.⁶ While the language in the order appears to protect previously-certified facilities from a *Broadview* rule challenge upon recertification, SEIA respectfully requests that the Commission clarify that all Qualifying Facilities that certified prior to September 1, 2020 and at minimum those previously certified QFs that must recertify in the future due to ownership, corporate, or administrative changes will not be subject to a *Broadview* challenge. This is necessary to avoid disruption given that previously-certified Qualifying Facilities did not have notice of the Commission’s rule changes and were in the process of negotiating transactions, ordering equipment, beginning construction, and finalizing debt arrangements as of September 1, 2020. If the Commission did not intend to protect previously-certified facilities from a *Broadview* challenge upon recertifications made in due course, then SEIA seeks rehearing. Excluding such projects from

⁴ See *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231, at 61,445 (1981) (“*Occidental*”) (stating that “the ‘power production capacity’ of a facility cannot be determined by looking only to the nominal rating of generating equipment in the facility”); *Malacha Power Project, Inc.*, 41 FERC ¶ 61,350 (1987) (“*Malacha*”) (holding that “when the interconnection equipment is part of the qualifying facility, the electric power production capacity of the facility is the capacity that the electric power production equipment delivers to the point of interconnection with the purchasing electric utility’s transmission system”); *American Ref-Fuel Co. of Bergen County*, 54 FERC ¶ 61,287 (1991) (taking into account the “technical realities of the industry”).

⁵ See 16 U.S.C. § 796(17)-(18).

⁶ See Broadview Order at P 27.

grandfathering would put these previously-certified projects at risk of losing QF certification and severely and unreasonably upend transactions for large numbers of project owners and financing parties.⁷ SEIA respectfully requests clarification that recertification will not jeopardize the QF status of previously-certified facilities; if the Commission does not so clarify, then SEIA seeks rehearing.

I. Statement of Issues

PURPA's Title II, including Section 201 and 210, is "to encourage the development of cogeneration and small power production facilities" by addressing "problems impeding the development of non-traditional generating facilities."⁸ Congress defined a "small power production facility" as a facility that relies on qualifying technology and "has a power production capacity which, together with any other facilities located at the same site (as determined by the Commission) is not greater than 80 megawatts."⁹ In issuing the Broadview Order the Commission has acted unlawfully. In accordance with Rule 713(c)(1) SEIA submits the following specification of errors:

- The Commission has acted unlawfully and did not comply with the APA's mandate to conduct a "notice and comment" rulemaking when issuing a legislative rule. Overturning well-settled and long-established precedent in an individual proceeding without providing adequate notice and comment procedures is arbitrary, capricious, and an abuse of discretion. *See* 5 U.S.C. § 706(2); *Zhang v. Slattery*, 55 F.3d 732, 744 (2d Cir. 1995) (explaining that the APA empowers federal courts to "hold unlawful and set aside agency action, findings, and conclusions found to be . . . without observance of procedures required by law"); *see also Mendoza v. Perez*, 754 F.3d 1002, 1021 (D.C. Cir. 2014) (explaining that notice and comment procedures are necessary when "[a] rule is legislative if it supplements a statute, adopts a new position inconsistent with existing regulations, or otherwise effects a substantive change in existing law or policy."); *Iowa League of Cities v. EPA.*, 711 F.3d 844, 873 (8th Cir. 2013) ("[A] rule is legislative if it expands the footprint of a regulation by imposing new requirements, rather than simply interpreting the legal norms Congress or the agency itself has previously created.") (citations omitted); *Syncor Int'l Corp. v. Shalala*, 127 F.3d 90, 95 (D.C. Cir. 1997) (explaining that notice and comment

⁷ *Id.* (discussing concerns regarding industry disruption).

⁸ *FERC v. Mississippi*, 456 U.S. 742, 750 (1982).

⁹ 16 U.S.C. 796(17)(A).

procedures are necessary when “an agency creates a new legal norm based on the agency’s own authority to engage in supplementary lawmaking, as delegated from Congress, the agency creates a legislative rule.”) (citations omitted).

- The Commission acted unlawfully, and in violation of the APA, by using adjudicatory proceedings to circumvent rulemaking procedures and failing to provide a reasoned explanation for departing from well-understood and long-accepted precedent. *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515-16 (2009) (“*FoxMotor Vehicles Mfrs. Ass’n v. State Farm*, 463 U.S. 29, 33 (1983) (explaining that a policy change violates the APA if the agency ignores or countmands its earlier factual findings without reasoned explanation for doing so); *Cities of Anaheim, Riverside, Banning, Colton, Azusa v. FERC* 723 F.2d 656, 659 (9th Cir. 1984) (“*Cities of Anaheim*”) (explaining that an agency cannot use adjudicatory proceedings to circumvent rulemaking obligations).
- The Commission has acted unlawfully and contrary to the express statutory directives of PURPA by issuing revised rules that discriminate against solar QFs and discourage investment in, and development of, solar QFs. In replacing a long-accepted and well-understood methodology with a vague and confusing rule that does not take into account the physical and electrical capabilities of the Qualifying Facility the Commission has acted arbitrarily, capriciously, and not consistent with reasoned decisionmaking. *See, e.g.*, 16 U.S.C. 796(17)-(18); 824a-3(a) (providing that the Commission shall prescribe rules “as it determines necessary to encourage cogeneration and small power production”); *see also Organized Vill. of Kake v. U.S. Dep’t of Agric.*, 795 F.3d 956, 966 (9th Cir. 2015) (en banc) (finding that the agency had failed to provide a reasoned explanation for contracting its findings and upheld the remedy of reinstating the rule previously in force).

II. Request for Rehearing

While the Commission has broad discretion to establish policies of general applicability in either a rulemaking proceeding or an individual adjudication,¹⁰ here the Commission has acted unlawfully. The APA requires that this Commission act in accordance with the notice and comment procedures when issuing legislative rules. This is not discretionary and in *Cities of Anaheim*, the

¹⁰ *NLRB v. Bell Aerospace Company*, 416 U.S. 267, 292-93 (1974); *SEC v. Chinery Corporation*, 332 U.S. 194, 202-04 (1947); and *Missouri-Kansas-Texas Railway Company v. United States*, 632 F.2d 392, 409 (5th Cir. 1988).

Ninth Circuit explained that FERC cannot use adjudicatory proceedings to circumvent the notice and comment rulemaking procedures required by the APA.¹¹

Broadview submitted an application to initiate this docket on September 11, 2019.¹² The Commission initiated the Notice of Proposed Rulemaking in Docket No. RM19-15 on September 19, 2019 (“PURPA NOPR”)¹³ and issued its Final Rule on July 16, 2020 (“PURPA Rule”).¹⁴ Broadview Solar’s docket was open before the Commission issued the PURPA NOPR, but at no time during the course rulemaking proceeding did the Commission indicate it was considering revising its long-standing rule setting for determining a Qualifying Facility’s maximum power production capability. Notably, both the PURPA NOPR and PURPA Rule devote substantial discussion to FPA Section 3(17)(A)(ii) but fail to include any discussion of the long-standing *Occidental* precedent. Issuing a rule pursuant to PURPA Section 201 in an individual adjudicatory proceeding just six weeks after issuing the PURPA rule is a violation of the APA and an abuse of discretion.

SEIA accordingly requests rehearing. The *Broadview* rule imposes undue hardships on owners and operators of, and investors in, Qualifying Facilities by “suddenly changing direction, to

¹¹ See *Cities of Anaheim*, 723 F.2d at 659-660 (explaining “The second limiting doctrine is that agencies may not use adjudication to circumvent the Administrative Procedure Act’s rulemaking procedures”). See also *NLRB v. Wyman-Gordon Co.*, 394 U.S. 759 (1969); *Montgomery Ward Co. v. FTC*, 691 F.2d 1322 (9th Cir. 1982); *Patel v. INS*, 638 F.2d 1199 (9th Cir. 1980); *Ruangswang v. INS*, 591 F.2d 39 (9th Cir. 1978).

¹² See Broadview Solar LLC, Application for Certification of Qualifying Small Power Production Facility Status, Docket No. QF17-454-004 (Sept. 11, 2019) (“Broadview application”).

¹³ *Qualifying Facility Rates and Requirements, Implementation Issues Under the Public Utility Regulatory Policies Act of 1978*, 168 FERC ¶ 61,184 (September 19, 2019) (“PURPA NOPR”).

¹⁴ *Qualifying Facility Rates and Requirements*, Order No. 872, 172 FERC ¶ 61,041 (July 16, 2020) (“PURPA Rule”).

the detriment of those who have relied on past policy.”¹⁵ The Commission has failed to provide a rational justification for departure from the *Occidental* precedent and the proposed *Broadview* rule is vague, confusing, and untethered from the physical or electrical realities of renewable installations. If not reversed, the *Broadview* Order will result in discrimination against solar QFs and will discourage capital market investors from providing financing to facilities under FERC’s jurisdiction. This Commission is not empowered to issue rules and regulations that discourage the development of Qualifying Facilities. PURPA instructs the Commission to act otherwise.

A. The Commission Failed to Follow Required Notice and Comment Procedures; Prior Policy Should be Reinstated

In overturning the *Occidental* precedent in the *Broadview* Order, the Commission has improperly circumvented required rulemaking procedures.¹⁶ While the Supreme Court has determined that the choice between rulemaking and adjudication lies in the first instance within the agency’s discretion,¹⁷ but “there may be situations where the [agency’s] reliance on adjudication would amount to an abuse of discretion.”¹⁸ This is the case here.

While agencies are generally empowered to amend or repeal existing rules, the APA requires that FERC comply with notice and comment procedures when making significant policy

¹⁵ See, e.g., *Cities of Anaheim*, 723 F.2d at 659-660 (citing *Ruangswang v. INS*, 591 F.2d 39 (9th Cir. 1978)).

¹⁶ *Id.* (explaining that “agencies may not use adjudication to circumvent the Administrative Procedure Act’s rulemaking procedures”); *Perez v. Morg. Bankers Ass’n*, 135 S. Ct. 1199, 1206 (2015) (“*Perez*”). Compare *Boston Edison Co. v. FPC*, 557 F.2d 845, 849, cert denied 434 U.S. 956 (1977) (finding that FERC “acted arbitrarily and abused its discretion in applying a standard contrary to its existing regulations”).

¹⁷ See, e.g., *NLRB*, 416 U.S. at 294; *SEC v. Chenery Corp.*, 332 U.S. 194, 202-203 (1947) (explaining that statutory directives “should be performed, as much as possible, through the quasi-legislative promulgation of rules to be applied in the future.”).

¹⁸ *NLRB*, 416 U.S. at 294.

changes or reversals.¹⁹ Where an agency fails to follow notice and comment procedures, the appropriate remedy is reinstatement of the prior rule.²⁰ Accordingly, SEIA requests expeditious rehearing and immediate reinstatement of the *Occidental* precedent.

1. The Commission Has Issued a Legislative Rule Without Required Notice and Comment Procedures

Under the APA, all legislative rules — no matter how costly or consequential — are governed by a single, set of procedures.²¹ While the APA exempts so-called “interpretive rules” and “general statements of policy” from the requirements of notice and comment rulemakings, there is no doubt that the Broadview Order is a legislative rule.²²

The APA mandates that the Commission undertake a minimum set of notice and comment procedures when “formulating, amending, or repealing a rule.”²³ Prior to overturning the *Occidental* precedent, FERC was required to issue (a) a “[g]eneral notice of proposed rule making,”²⁴ (b) “give interested persons an opportunity to participate in the rule making through submission of written

¹⁹ See, e.g., *Perez*, 135 S. Ct. at 1206.

²⁰ *Turtle Island Restoration Network v. United States DOC*, 672 F.3d 1160 (9th Cir. 2012) (explaining that the effect of invalidating an agency rule is to reinstate the rule previously in force).

²¹ See, e.g., *Modernizing the Administrative Procedures Act*, Final Report of the U.S. Department of Justice, Office of the Deputy Attorney General.

²² See, e.g., *Iowa League of Cities*, 711 F.3d 844 (explaining that “[t]he hallmark of an interpretative rule or policy statement is that they cannot be independently legally enforced”); *United Technologies Corp. v. EPA*, 821 F.2d 714, 719-20 (D.C. Cir. 1987) (explaining that “If, however, the rule is based on an agency’s power to exercise its judgment as to how best to implement a general statutory mandate, the rule is likely a legislative one.”).

²³ 5 U.S.C. § 551(5). “Rule,” in turn, is defined to include “statement[s] of general or particular applicability and future effect” that are designed to “implement, interpret, or prescribe law or policy. *Id.* at 551(4).

²⁴ *Id.* at § 553(b).

data, views, or arguments,”²⁵ (c) consider and respond to significant comments received during the period for public comment,²⁶ and (d) provide a general statement of basis and purpose.²⁷ FERC did none of these. Agencies are bound to follow notice and comment procedures if they intend to issue legally binding rules.²⁸ Where those procedures are not followed, it is appropriate to reinstate prior policy.²⁹

2. The Commission Failed to Provide a Reasoned Explanation for Departing from Long-Accepted Precedent

As the Supreme Court recently explained, “[o]ne of the basic procedural requirements of administrative rulemaking is that an agency must give adequate reasons for its decisions.”³⁰ In *FCC v. Fox Television Stations*, the Supreme Court walked through the components of a reasoned explanation, stating that an agency must (1) display “awareness that it is changing position,” (2) show that “the new policy is permissible under the statute,” (3) “believe” the new policy is better, and (4) provide “good reasons” for the new policy, which, if the “new policy rests upon factual

²⁵ *Id.* at § 553(c).

²⁶ See *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U. S. 402, 416 (1971).

²⁷ 5 U.S.C § 553(c).

²⁸ See *Croplife Am. v. EPA*, 329 F.3d 876, 883 (D.C. Cir. 2003) (explaining that rules that bind the private party and the agency are legislative rules); *Sprint Corp. v. FCC*, 315 F.3d 369, 374 (D.C. Cir. 2003) (explaining that agency rules that “change the rules of the game” are legislative rules); *Am. Mining Cong. v. Mine Safety & Health Admin.*, 995 F.2d 1106 (D.C. Cir. 1993) (explaining that legislative rules are produced when Congress has delegated legislative power to the agency and the agency intended to exercise that power in promulgating the rule); *see also Perez*, 135 S.Ct. at 1211 (2015) (Scalia, concurrence) (explaining that “An agency may use interpretive rules to advise the public by explaining its interpretation of the law. But an agency may not use interpretive rules to bind the public by making law, because it remains the responsibility of the court to decide whether the law means what the agency says it means.”).

²⁹ *Paulsen v. Daniels*, 413 F.3d 999, 1008 (9th Cir. 2005).

³⁰ *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117 (Jun. 2016) (“*Encino*”).

findings that contradict those which underlay its prior policy,” must include “a reasoned explanation . . . for disregarding facts and circumstances that underlay or were engendered by the prior policy.”

The Commission has failed to do any of this and did not provide a reasoned explanation for departing from its *Occidental* precedent.³¹ The Supreme Court found that a reasoned explanation is one that address the “facts and circumstances that underlay or were engendered by the prior policy,” including any “serious reliance interests.”³² Here, the Commission has failed to meet this standard.³³

There is no logical policy justification for the Commission’s new *Broadview* rule, other than discouraging or otherwise limiting investment in solar QFs. No party of record protested the *Occidental* precedent nor argued that the “send out” methodology was an improper measure of a Qualifying Facility’s power production capacity. Protesting parties argued that *Occidental* was inapplicable to the Broadview Solar project³⁴ or that the Broadview Solar project had not complied with the methodology,³⁵ but there is no record of any party in the proceeding seeking to overturn *Occidental* precedent or its “send out” rule. The Commission appears to have taken this action *sua sponte*, explaining that a single application from a developer “compels us to reconsider whether it is

³¹ *Id.* (when an agency reverses a prior decision, it must “provide a reasoned explanation for the change”).

³² *Fox*, 556 U.S. at 515.

³³ See, e.g., *Smiley v. Citibank*, 517 U.S. 735, 742 (1996) (explaining that sudden and explained change, or change that does not take into account legitimate reliance on prior interpretation, may be arbitrary, capricious, or an abuse of discretion); *United States v. Mead Corp.*, 533 U.S. 218, 229-30 (2001) (explaining that an arbitrary and capricious regulation of this sort is itself unlawful and receives no Chevron deference).

³⁴ See, e.g., Motion to Intervene and Protest of Northwestern Corporation, Docket No. QF17-454-004 (Oct. 2, 2019).

³⁵ See, e.g., Motion to Intervene and Protest of the Edison Electric Institute, QF17-454-004 (Oct 2, 2019).

a facility’s ‘send out’ that is determinative of whether the facility complies with the 80 MW threshold established in PURPA.”³⁶ There is no reasoned basis for such an action when the Commission had just issued the PURPA Rule six weeks prior to issuing the Broadview Order. With decades of industry reliance on the Commission’s *Occidental* precedent, and no record that any industry participant requested reconsideration of the *Occidental* precedent, the Commission has failed to proffer a reasoned explanation sufficient to satisfy the standards of the APA.³⁷

As was the case for the agency action under review by the Supreme Court in *Encino*, when presented with the opportunity to explain “the good reasons for the new policy,” FERC’s Broadview Order says “almost nothing.”³⁸ A lack of reasoned explanation for departing from the *Occidental* precedent “results in a rule that cannot carry the force of law.”³⁹ In light of the serious reliance interests at stake, the Commission’s conclusory statements do not suffice to explain its decision to overturn the long-accepted *Occidental* precedent. SEIA respectfully requests rehearing.⁴⁰

3. Circumventing a Rulemaking Procedure is Arbitrary, Capricious, and an Abuse of Discretion

The APA provides that FERC may not adopt by adjudication, a new rule that departs radically from the agency’s previous interpretation of the law, where the public has relied substantially and in good faith on the previous interpretation, where fines or damages are involved,

³⁶ Broadview Order at P 22.

³⁷ See, e.g., *Encino*, 136 S.Ct at 2126 (explaining that because of decades of industry reliance on the Department’s prior policy—the meager explanation fell short of the agency’s duty to explain why it deemed it necessary to overrule its previous position).

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ See *id.*; see also *Fox*, 556 U.S at 515.

or where the new standard is very broad and general in scope and prospective in application.⁴¹ As the Ninth Circuit explained in *Cities of Anaheim*, FERC may not use its adjudicatory function to “circumvent the [APA’s] rule making procedures” by amending “a recently adopted rule . . . or to supplant a pending rule making proceeding.”⁴² Overturning the *Occidental* precedent in the individual adjudicatory proceeding of Broadview Solar is arbitrary, capricious, and an abuse of discretion.

The PURPA NOPR was issued after Broadview’s application was filed in this docket and the Commission could have, at any time, provided notice that it would reexamine its *Occidental* precedent in light of the ongoing examination of rules and regulations issued pursuant to FPA Section 3(17).⁴³ In the PUPRA NOPR, the Commission considered revisions to its rule and regulations interpreting Section 3(17) of the FPA.”⁴⁴ At no time did the Commission suggest it was considering a revision to long-accepted precedent to define the statutory phrase “power production

⁴¹ *NLRB*, 416 U.S. at 294. As the Supreme Court has explained, Section 1 of the APA mandates that agencies use the same procedures when they amend or repeal a rule as they used to issue the rule in the first instance. *See also Fox*, 556 U.S 515 (explaining that new policy rests upon factual findings that contradict those which underlay its prior policy; or when its prior policy has engendered serious reliance interests that must be taken into account.); *Perez*, 136 S.Ct. at 1209 (same).

⁴² *Cities of Anaheim*, 723 F.2d 656 at 659.

⁴³ 16 U.S.C. § 796(17)(A)(ii) (which provides that a small power production facility must have “a power production capacity which, together with any other facilities located at the same site (as determined by the Commission), is not greater than 80 MW”).

⁴⁴ 16 U.S.C. § 796(17)(A)(ii).

capacity” set forth in Section 3(17) of the FPA. There appears no logical justification for the Commission’s failure to include consideration of the *Occidental* precedent in the PURPA NOPR.

On July 16, 2020 when the Commission issued the PURPA Rule, it concluded that its changes to the “same site” interpretation, together with the definition of “electrical generating equipment” and revision to the FERC Form 556, aligned with “Congress’s requirement that QFs seeking to certify as small power production facilities are less than 80 MW statutory limit for such facilities.”⁴⁵ In announcing a mere six weeks later that additional revisions to the rules were needed to comply with Congress’s requirement that QFs seeking to certify as small power production facilities are in fact below 80 MW it is clear that the Commission inappropriately circumvented rule making procedures. The Commission’s announcement of a reversal of the *Occidental* precedent through an adjudicatory docket shortly after closing a rulemaking on the same issue is arbitrary, capricious, and an abuse of discretion.⁴⁶ Accordingly, SEIA seeks rehearing.

B. Revised Rules Discriminate Against Solar QFs and Discourage Investment in, and Development of, Solar QFs

In the Broadview Order the Commission reversed the *Occidental* precedent and eliminated the “send out” analysis.⁴⁷ In its place, the Commission has promulgated a revised methodology that is vague, confusing, and both discriminates against solar QFs and discourages the investment in, and development of, solar QFs.⁴⁸ Unlike the long-accepted and well-understood “send out” analysis, the

⁴⁵ PURPA Rule at P 465.

⁴⁶ In this instance, the Commission has departed from the zone of deference commonly granted to agency discretion. *Compare SEC v. Chenery Corp.*, 332 U.S. 194, 202 (1947) (providing that "the choice made between proceeding by general rule or by individual, ad hoc litigation is one that lies primarily in the informed discretion of the administrative agency.")

⁴⁷ Broadview Order at P 23.

⁴⁸ *Id.* at PP 23-26.

Commission's revised *Broadview* rule is confused and confusing. SEIA seeks rehearing and reinstatement of the *Occidental* precedent.⁴⁹

1. Direct Current is Not an Appropriate Measure of a Qualifying Facility's Power Production Capacity

Solar panels produce direct current ("DC"), with all electrons flowing in the same direction, and require inverters to convert the DC energy into Alternating Current ("AC") energy for delivery into the electric grid at the Point of Interconnection ("POI"). As has long been the industry convention, both traditional and renewable utility-scale generation sources are described in AC terms. By ordering that solar QFs "may record only the parasitic loads and losses that occur independent of the output limiting function of inverters or other output limiting devices"⁵⁰ on line 7 of the Form 556, the Commission has required that solar QFs report DC ratings in the Form 556 while all other forms of QFs continue to use an AC rating. Thus, under the *Broadview* rule a solar QF is required to report its maximum capacity as a DC rating while all other forms of QF technologies can report a more accurate AC rating. Due to system losses from DC to AC conversion and other sources, following the *Broadview* rule, it is physically impossible for a solar facility with 80 MW (DC) to achieve the PURPA 80 MW (AC) power production limit. The *Broadview* rule effectively sets two PURPA facility size limits based upon QF technology: the well-established limit of 80 MW AC for all non-solar QFs (cogeneration, biomass, wind, etc.) and a limit lower than 80 MW AC for solar QFs. This is discriminatory.

For well over 100 years, the United States electric grid has been operated on AC voltage. The Commission's conclusion that it is appropriate to ignore a solar QF's DC to AC conversion

⁴⁹ See *id.* at P 23 (describing the *Occidental* precedent).

⁵⁰ *Id.* at P 24.

equipment (the inverters) for the purposes of calculating the facility’s power production capacity, is not the product of reasoned decisionmaking. From the time that Tesla and Westinghouse won the so-called “War of the Currents,” the equipment specifications for all interconnected equipment and load, engineering standards for generation equipment, and the technical standards for flow of power on transmission and distribution systems have all been measured and regulated in AC, with limited exceptions for non-standard interconnections. In essence, the Commission is requiring solar generating facility owners to ignore the modern equipment in their systems that translates DC energy into a world communicating in AC. While solar QFs have both an AC and DC rating, the DC rating corresponds to the theoretical maximum output of the modules while the AC rating “is always lower than the DC rating because of losses associated with converting DC to AC.”⁵¹ All transmission providers utilize an AC rating to measure a solar facility and all electric utilities use AC ratings to purchase from solar QFs pursuant to the direction of Section 210 of PURPA. Requiring solar QFs to record power production capacity in DC voltage is not a rational departure from the *Occidental* precedent. In preventing solar QFs from measuring their power production capacity based on the AC inverter ratings, Commission’s *Broadview* rule runs contrary to standard industry practice.

If the Commission did not intend to prevent solar QFs from reporting their power production capacity as an AC rating, then the Commission should clarify the mathematical calculation that solar QFs should perform to convert the DC ratings of the modules into an appropriate AC calculation without relying on the inverters. Requiring solar QFs to complete Form 556 based on laboratory-issued module ratings in DC will produce an artificially high and inaccurate power production

⁵¹ See *Solar Energy and Capacity Value*, National Renewable Energy Laboratory, available at <https://www.nrel.gov/docs/fy13osti/57582.pdf>.

capacity for the Facility.⁵² If solar QFs are required to utilize DC ratings for Form 556, but in all other cases are required to use AC ratings, confusion will abound. The purpose of Form 556, as the Commission explained in Order No. 732, is to provide all parties with notice of the official designation, operating, and ownership characteristics of the Qualifying Facility.⁵³ Intentionally creating an incongruence between the Form 556 designation (e.g., DC rating), the Qualifying Facility's interconnection and power purchase agreements (e.g., AC rating), and the project's reliability obligations (AC rating), will introduce substantial confusion, friction, and likely litigation whether from transmission providers managing interconnections,⁵⁴ purchasing electric utilities negotiating the contracts,⁵⁵ or capital market providers. Accordingly, SEIA seeks rehearing.

2. Module Ratings Are Not Indicative of Facility's Power Production Capacity

The Commission has offered no rational or legitimate justification for departing from well-settled precedent that Congress intended a Qualifying Facility's power production capacity to be measured based on "the amount of electric power actually capable of being displaced by the

⁵² This inaccuracy is material. Per Lawrence Berkley National Laboratory ("LBNL") data, the average delta between MW DC and MW AC nameplate for solar facilities with average design parameters in the last decade is 20% to 40%. See *Utility-Scale Solar Empirical Trends in Project Technology, Cost, Performance, and PPA Pricing in the United States* (2019 edition), available at: https://eta-publications.lbl.gov/sites/default/files/lbnl_utility_scale_solar_2019_edition_final.pdf ("LBNL Report").

⁵³ *Revisions to Form, Procedures, and Criteria for Certification of Qualifying Facility Status for a Small Power Production or Cogeneration Facility*, Order No. 732, 130 FERC ¶ 61,214, at P 5 (2010).

⁵⁴ For example, if a 20 MW (AC) Qualifying Facility has entered into a small generator interconnection agreement and subsequently is required to restate the power production capacity in its Form 556 as a DC rating, can the Transmission Provider revoke and/or deny access to market constructs designed for facilities that are at or below 20 MW?

⁵⁵ Hypothetically, a purchasing electric utility could deny a solar QF a standard offer contract claiming that the DC rating in the Form 556 disqualifies the solar QF from the AC-based program.

facility.”⁵⁶ In ordering QFs to “record only the parasitic loads and losses that occur independent of the output limiting function of inverters or other output limiting devices,” and report “under the most favorable anticipated design conditions” the Commission is blatantly ignoring the physical and electrical realities of standard solar facility design.⁵⁷ This confusing and illogical standard cannot be supported as a valid or rational measure of a solar QF’s power production capacity. No other generation technology under PURPA must apply such a peculiar and arbitrary standard.

In requiring that solar QFs report a nameplate capacity based on ideal conditions without relying on inverters, the Commission seems to be suggesting that solar QFs rely on the laboratory ratings of the modules. The module ratings provided with the panels are ratings obtained under tightly controlled and highly optimized laboratory conditions, not real operating conditions. Specifically, manufacturers provide buyers module ratings based on either, or both, Standard Test Conditions (“STC”) and Photovoltaics for Utility Scale Application Test Conditions (“PTC”). STC ratings are determined with the light source in the laboratory calibrated so that precisely 1,000 watts per square meter of solar light falls on the photovoltaic panel while the temperature of the solar cells and the ambient room temperature are both set to 77 degrees. Notably, STCs do not measure the effect of temperature change on the cells and are not indicative of power production capacity. The PTC ratings use the same lighting conditions as STC, but control for panel heat of 13 degrees while maintaining an ambient room temperature of 68 degrees with the modules exposed to a 2.2 mph windspeed. Normal Operating Cell Temperature (“NOTC”) ratings assume a more realistic 800

⁵⁶ *Penntech Papers, Inc.*, 48 FERC ¶ 61,120. 61,423 (1989) (certifying a transmission line as part of the Qualifying Facility and adjusting the power production capacity accordingly).

⁵⁷ By way of brief background, a solar module is a single photovoltaic panel made up of many connected solar cells that absorb sunlight as a source of energy to generate DC electricity. Without inverters, solar facilities cannot convert the DC electricity into a usable AC voltage. Inverters can be located at the panel level or in a string formation.

watts per square meter of sunlight irradiance, an air temperature of 68 degrees, and a 2.2. mph windspeed. While PTC and NOTC ratings provide a more accurate measure than STC, the module ratings substantially overstate the power production capacity because real world conditions rarely resemble these optimized laboratory settings. Actual site conditions, including limitations on the energy resource supply, have always been considered as part of the Commission's determination of a QF's power production capacity.⁵⁸

Characteristics such as temperature, shading, and orientation affect the module's ability to produce power commensurate with the laboratory ratings. In order to provide power purchasers with a more stable delivery of AC electricity, solar system designers add additional modules so that the inverters can operate closer to (or at) full capacity for a greater percentage of the day, season, or year. Overbuilding the DC capacity relative to AC capacity is a best practice for all commercial solar facilities, not just solar QFs. As the Energy Information Administration ("EIA") explained, overbuilding the DC capacity relative to the AC output is practical because (1) the output of the panels may only reach peak DC capacity a few hours out of each year and (2) panel output changes over the course of the year, when the sun is at different altitudes, and output declines as modules degrade over time.⁵⁹ This measurement between the DC solar array and the AC inverters is commonly referred to as the "Inverter Load Ratio."

The ability to deliver electricity during the shoulder periods provides value to the power purchaser and outweighs the cost to the developer of installing additional modules.⁶⁰ In the rare

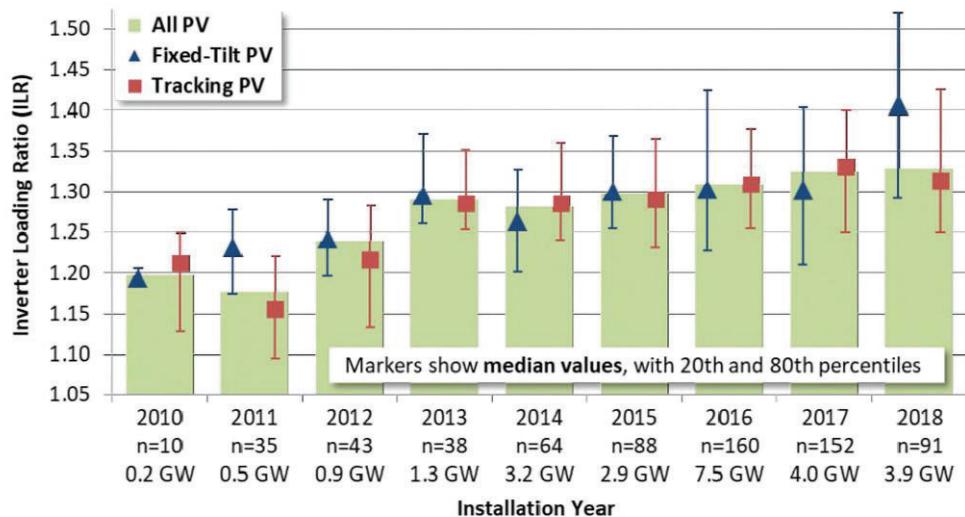
⁵⁸ See, e.g., *Occidental*, 17 FERC at 61,444-445.

⁵⁹ See *Solar Plants Typically Install More Panel Capacity Relative to Their Inverter Capacity*, Energy Information Administration (March 16, 2018), available at <https://www.eia.gov/todayinenergy/detail.php?id=35372>.

⁶⁰ See LBNL Report at 16-17.

instances that the peak module production exceeds the inverter injection limit, the excess energy is “clipped” by the inverter and can be stored if energy storage technology is integrated with the facility. As the Lawrence Berkley National Laboratory research team documented, Inverter Load Ratios are, on average, around 1.3-1.4, with fixed tilt projects commonly featuring higher ILRs than tracking projects, as fixed tilt systems will produce power at a lower percentage of the STC than tracking systems.

Figure 1
Trends in Inverter Loading Ratio by Mounting Type and Installation Year⁶¹



An Inverter Load Ratio of greater than 1 indicates that the system has been designed so that the inverters operate closer to full capacity for a greater percentage of the delivery period.⁶²

Figure 2

⁶¹ See LBNL Report at Figure 7.

⁶² An inverter load ratio of 1 indicates that DC production capacity equals AC production capacity. An inverter load ratio of 1.4 indicates that DC production capacity exceeds AC production capacity by 40%. An 80 MW DC solar QF with an inverter load ratio of 1.4 has a 57 MW AC power production capacity (not inclusive of system-specific losses). See, e.g., *id.* at 16-17 (describing Inverter Load Ratio).

Energy production as a function of time of day⁶³

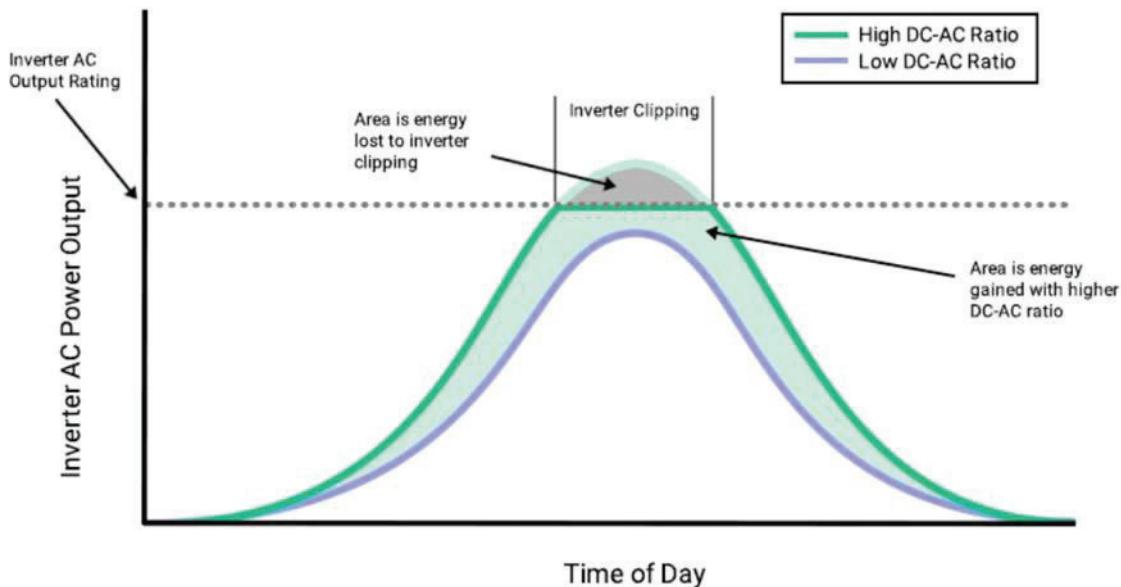


Figure 2, shown above, provides a graph of energy production as a function of time of day.

The purple line shows a typical bell curve of AC output power peaking at noon, just below the rating of the inverter indicated by the dashed line. Adding more panels to increase the size of the solar array increases the DC-to-AC ratio of the system (as illustrated by the green curve), allowing greater energy harvest throughout the day. The area between the green and purple curves is the energy that is gained by increasing the DC-to-AC ratio.

In ignoring these physical and electrical realities of the design and operation of solar QFs, the Commission has implemented a confusing rule that does not approximate an accurate measure of any individual solar facility's power production capacity. At the bottom line, module ratings are not an accurate, or appropriate, proxy for a solar QF's power production capacity. The only correct

⁶³ This graph was prepared by Aurora Solar and published in Solar Power World. See *Why Array Oversizing Makes Financial Sense*, Solar Power World (Feb. 12, 2018), available at https://new.abb.com/docs/librariesprovider117/default-document-library/solar-inverters/solar_power_world-article.pdf?sfvrsn=80a7614_4.

measure of solar QF's power production capacity is the AC current that the system is designed and integrated to deliver at the POI.

3. ***Broadview Prevents Solar QFs from Contracting to Sell the Entire Net Output***

The Commission's long-standing precedent is clear: purchasing utilities are obligated to purchase up to 80 MW of net output from a Qualifying Facility unless a waiver of the purchase obligation has been obtained. As the Commission succinctly explained in Order No. 671, electric utilities are required to purchase the electric energy from Qualifying Facilities, "which the Commission interprets to mean electric energy produced by the QF."⁶⁴ In the 2017 *Patu Wind* decision, the Commission again affirmed its long-standing precedent that electric utilities must purchase the "entire net output (all energy less onsite uses and losses) delivered."⁶⁵

As a matter of course, purchasing electric utilities and state regulators will not endorse a purchase contract with a QF for an amount greater than that listed on the Qualifying Facility's Form 556. Yet, to produce 80 MW of AC output, a solar QF must install more than 80 MW of DC-rated panels; it is electrically impossible to achieve 80 MW of AC output otherwise. If a solar QF were to follow the *Broadview* rule, there would not be a pathway by which the solar QF could contract to sell up to 80 MW (AC) to an electric utility. The *Broadview* rule effectively prevents solar QFs from exercising their rights under PURPA and allows purchasing utilities to "routinely escape their

⁶⁴ See *Revised Regulations Governing Small Power Production and Cogeneration Facilities*, Order No. 671, 114 FERC ¶ 61,120, P 101 (2006).

⁶⁵ See *Patu Wind Farm, LLC*, 150 FERC ¶ 61,032, P 54 reh'g denied 151 FERC ¶ 61,223, P 44 (2016).

PURPA mandatory purchase obligation.”⁶⁶ For a solar QF to be able to sell its “entire net output (all energy less onsite uses and losses) delivered,”⁶⁷ it must be able to self-certify up to 80 MW (AC).

As the Commission has explained, when a QF is prevented from delivering its entire net output to the utility, the utility is able to “escape” the mandatory purchase obligation.⁶⁸ Yet, in an unexplained and unjustified departure from precedent, the Commission has now ordered Qualifying Facilities to measure their power production capacity based on the theoretical gross output of some components of the Facility. The Commission has effectively provided all electric utilities a pathway to escape the obligation to purchase the QF’s entire net output. The Commission’s *Broadview* rule is unlawful to the extent it prevents solar QFs from contracting to sell 80 MW (AC) to a purchasing utility. The Commission has acted in direct violation of statutory direction. Accordingly, SEIA requests rehearing.

4. *Broadview* Discourages Capital Market Investments in Qualifying Facilities

It is clear that the *Broadview* rule did not take into account the physical or electrical realities of solar installations. First, the Order failed to specify if the reporting entity should measure the module capacity based on the STC, PTC, NOTC, or some other measurement. Second, the Order failed to explain how reporting entities should take into account site-specific factors like shading on the panels, orientation, or temperature; all of which affect the Facility’s power production capacity. Third, as described above, the Broadview Order artificially limits the size of solar QF projects by requiring an inaccurate and discriminatory measure of capacity based on a simple aggregation of

⁶⁶ *Patu Wind Farm, LLC*, 150 FERC at P 53.

⁶⁷ *Id.*

⁶⁸ *Patu Wind Farm, LLC*, 151 FERC at P 46.

laboratory-ratings of individual modules that is not an accurate proxy of the QF’s “power production capability.” Essentially, the Commission is requiring that Qualifying Facilities report inaccurate measurements that ignore physical and electrical realities. This is a *defacto* discouragement of Qualifying Facilities.

The Commission’s ruling to determine a Qualifying Facility’s “power production capacity” without factoring in a solar QF’s inverters is contrary to reasoned decisionmaking. The Commission may not “avoid the Congressional intent clearly expressed in the text simply by asserting that its preferred approach would be better policy.”⁶⁹ Rather, as the Supreme Court instructed in *Fox*, the agency must engage in a reasoned decisionmaking process.⁷⁰ The *Occidental* “send out” analysis remains an accurate and nondiscriminatory measure of a Qualifying Facility’s power production capacity and the Commission has not provided any compelling or rational justification to supporting overturning this long-accepted precedent. The amount of power that can actually be displaced by the Qualifying Facility was, and remains, the most logical and rational understanding of the statutory language.⁷¹ The Commission’s *Broadview* rule is irrational, ignores the realities of the electrical operation of solar QFs, and discourages capital market investments in Qualifying Facilities. Revoking valid precedent and replacing it with a new rule that is irrational, confusing, and inconsistent with common industry understanding of a facility’s power production capacity discourages capital market investment in QFs. In issuing the *Broadview* rule, the Commission has

⁶⁹ *Engine Mfg. Ass’n v. EPA*, 88 F.3d 1075, 1089 (D.C. Cir. 1996); *S. Cal. Edison Co. v. FERC*, 195 F.3d 17 (D.C. Cir. 1999).

⁷⁰ *Fox*, 556 U.S. at 515.

⁷¹ See, e.g., *Salt River Project Agricultural Improvement and Power District v. Federal Power Commission*, 391 F.2d. 420 (D.C. Cir. 1968) (explaining that the courts have long recognized that in interpreting a statute one must not only review the language utilized, but its logic as well).

acted arbitrarily and capriciously. SEIA respectfully requests rehearing and a reinstatement of the *Occidental* rules.

III. Request for Clarification, or in the Alternative, Rehearing

If the Commission does not grant rehearing as requested above, then SEIA respectfully requests clarification of the Commission's holdings in Paragraph 27 of the Broadview Order.

In Paragraph 27 of the Broadview Order, the Commission stated that the Broadview Order "does not affect QFs that have self-certified or have been granted Commission certification prior to the date of this order." Given the extensive discussions in the PURPA Rule providing for a review and challenge process upon recertification of the Qualifying Facility, SEIA seeks clarification that recertification of a Qualifying Facility does not alter the grandfathering provided for in P 27 of the Broadview Order. SEIA respectfully requests that previously certified QFs will still be considered to be small power production facilities for purposes of PURPA and a recertification during the facility's useful life will not threaten this status.⁷² If the Commission does not so clarify, SEIA seeks rehearing.

A stable regulatory environment is necessary to ensure that capital market providers are willing to invest in assets subject to FERC's jurisdiction. At minimum, all previously certified QFs that must recertify as a result of completing an ownership, corporate, or other administrative change shall not be subject to a *Broadview* challenge. Previously-certified QFs are engaged in, and will continue to be engaged in, capital market transactions. In each of these transactions, capital market providers require robust representations affirming QF regulatory status of such projects. Ambiguity in the QF status of such projects jeopardizes their access to the capital markets and ensuring the

⁷² Broadview Order at P 27.

regulatory status of the facility is clearly established is a necessary perquisite to accessing capital market financing. Any previously-certified QF that was negotiating transactions, including but not limited to, taking equity investment, ordering equipment, beginning construction, and finalizing debt arrangements as of September 1, 2020 that will require recertification as part of that transaction should be clearly protected by the grandfathering provision. Excluding such projects from grandfathering would put these previously-certified projects at risk of losing QF certification and severely and unreasonably upend transactions for large numbers of project owners and financing parties. Parties were not provided notice that the Commission was considering overturning the *Occidental* precedent and it is appropriate for the Commission to clarify that the grandfathering proposed in P 27 will bind despite recertifications made in due course. SEIA requests that the Commission clarify its orders to eliminate the regulatory ambiguity that will otherwise arise and requests affirmation that all previously-existing facilities can represent and warrant to their transaction counterparties that the Qualifying Facility status will not be lost upon recertifications in due course. This is an essential clarification for parties with transactions underway in Q3 and Q4 of 2020. The Commission's Broadview Order has caused substantial friction and is causing unnecessary delay of capital market transactions.

If the Commission did not intend to grandfather all previously-certified facilities, and instead intended that recertification would expose a previously-certified facility to a loss of QF status, then SEIA requests rehearing. It cannot be the case that the Commission would expose "steel in the ground" to such a drastic consequence when the Commission has not provided a reasoned basis for its decision to overturn *Occidental*. Allowing a challenge to the facility's status as a small power production facility upon recertification, based on the *Broadview* rule, would be arbitrary, capricious, and an abuse of discretion. There should be no doubt this Commission has been instructed to

remove, not impose, burdensome regulations that discourage the flow of capital market investments. It would be unlawful to expose previously-certified projects to a risk of loss of status as a small power production facility when these parties close and complete transactions that were active and underway on September 1, 2020 and need to undertake similar future normal business transactions as described above. Failing to protect previously-certified Qualifying Facilities from a *Broadview* challenge upon a subsequent recertification made in due course of normal business operations would be arbitrary, capricious, and inconsistent with reasoned decisionmaking.

IV. Conclusion

For the foregoing reasons, SEIA respectfully requests rehearing and/or clarification.

Respectfully submitted,

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174 FERC ¶ 61,199
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Richard Glick, Chairman;
Neil Chatterjee, James P. Danly,
Allison Clements, and Mark C. Christie.

Broadview Solar, LLC

Docket No. QF17-454-006

ORDER ADDRESSING ARGUMENTS RAISED ON REHEARING AND
SETTING ASIDE PRIOR ORDER

(Issued March 19, 2021)

1. On September 1, 2020, the Commission issued an order¹ denying Broadview Solar, LLC's (Broadview) application seeking Commission certification that Broadview's proposed hybrid solar photovoltaic (PV) facility is a qualifying small power production facility (QF) pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA)² and section 292.207(b) of the Commission's regulations.³ In the same order, the Commission also revoked Broadview's self-certification of QF status filed on January 29, 2020, while the application for Commission certification was still pending.
2. On September 14, 2020, Broadview filed a request for rehearing of the September 2020 Order.⁴ On October 1, 2020, the Commission received requests for rehearing or clarification from NewSun Energy, LLC; Pine Gate Renewables, LLC; the Solar Energy Industries Association; Southern Current, LLC; and TerraForm Power, LLC.⁵

¹ *Broadview Solar, LLC*, 172 FERC ¶ 61,194 (2020) (September 2020 Order).

² 16 U.S.C. §§ 796(17), 824i, 824a-3.

³ 18 C.F.R. § 292.207(b) (2020).

⁴ Broadview Solar, LLC September 14, 2020 Request for Rehearing (Broadview Rehearing Request).

⁵ NewSun Energy, LLC October 1, 2020 Motion for Late Intervention and Petition for Rehearing; Pine Gate Renewables LLC, October 1, 2020 Motion to Intervene Out-of-Time, Request for Rehearing, or in the Alternative, Clarification; Solar Energy Industries Association September 28, 2020 Motion to Intervene Out-of-Time; Solar Energy Industries

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3. Pursuant to *Allegheny Defense Project v. FERC*,⁶ the rehearing requests filed in this proceeding may be deemed denied by operation of law. However, as permitted by section 313(a) of the Federal Power Act,⁷ we are modifying the discussion in the September 2020 Order and setting aside the result in this proceeding, as discussed below.⁸

I. Background

4. To be certified as a QF, a small power production facility must comply with the fuel use and size criteria specified in the Commission's regulations and must either file for self-certification of QF status or apply for and obtain Commission certification of QF status.⁹ Both filings incorporate Form No. 556. The primary energy source of the facility must be biomass, waste, renewable resources, geothermal resources or any combination thereof.¹⁰ The power production capacity of the facility cannot exceed 80 megawatts (MW).¹¹

Association October 1, 2020 Request for Rehearing and Clarification; Southern Current, LLC October 1, 2020 Motion to Intervene Out-of-Time; Southern Current, LLC October 1, 2020 Request for Rehearing and Clarification; Terraform Power, LLC October 1, 2020 Motion to Intervene Out-of-Time and Request for Clarification, or in the Alternative, Limited Rehearing.

⁶ 964 F.3d 1 (D.C. Cir. 2020) (en banc).

⁷ 16 U.S.C. § 825l(a) ("Until the record in a proceeding shall have been filed in a court of appeals, as provided in subsection (b), the Commission may at any time, upon reasonable notice and in such manner as it shall deem proper, modify or set aside, in whole or in part, any finding or order made or issued by it under the provisions of this chapter.").

⁸ *Allegheny Def. Project*, 964 F.3d at 16-17.

⁹ 18 C.F.R. § 292.203(a) (2020) (citing 18 C.F.R. §§ 292.204(a) (size limit), 292.204(b) (fuel use), 292.207(a) (self-certification), and 292.207(b) (application for Commission certification)).

¹⁰ *Id.* § 292.204(b).

¹¹ *Id.* § 292.204(a)(1).

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5. Broadview is developing a combined solar PV and battery storage facility in Yellowstone County, Montana, that will interconnect to NorthWestern Corporation's (NorthWestern) transmission system.¹² The facility will include a coupled array of solar PV panels with a gross capacity of 160 MW of direct current (DC) electricity and a battery energy storage system with the capacity to discharge 50 MW of DC electricity for up to 4 hours (i.e., a total of 200 MW-hours (MWh)).¹³ Broadview explained that the solar PV panels and battery energy storage system will connect to 20 inverters, each capable of converting DC electricity into a maximum output of 4.127 MW alternating current (AC) electricity.¹⁴ Together, the inverters will have a maximum output of 82.548 MW of AC electricity. After deducting facility loads and losses totaling 2.548 MW, the facility's maximum net output to NorthWestern's grid will be 80 MW of AC electricity.¹⁵ When the solar array produces more DC electricity than the inverters can convert to AC electricity, the excess DC electricity will be stored in the battery energy storage system and will not be delivered to the point of interconnection with NorthWestern's grid until a later time.¹⁶

6. Over the course of three years, Broadview filed three notices of self-certification for its facility and one application for Commission certification. In December 2016, Broadview filed a Form No. 556 to self-certify its proposed facility as a small power production QF with a maximum gross power production capacity of 104.25 MW and a maximum net power production capacity of 80 MW.¹⁷ In March 2019, Broadview revised its Form No. 556 to reflect a maximum gross power production capacity of 160 MW, while

¹² Broadview Solar, LLC September 11, 2019 Application at 1 (Broadview 2019 Application).

¹³ *Id.* at 2.

¹⁴ Broadview states that without the DC-to-AC inverters, the power is not in a form that can be transmitted onto the grid. Broadview claims that these inverters are the "gateway" between the DC power provided by the solar array and battery storage system and the AC grid because the amount that the 20 inverters can deliver limits the maximum gross power capacity of the facility (i.e., power that can be delivered to the AC grid). September 2020 Order, 172 FERC ¶ 61,194 at PP 2-3 (citing Broadview 2019 Application, Attachment B at 2-4 (Pasley Aff.)).

¹⁵ Broadview 2019 Application at 7-8.

¹⁶ September 2020 Order, 172 FERC ¶ 61,194 at P 6 (citing Broadview 2019 Application at 7).

¹⁷ Broadview Solar LLC December 19, 2016, Form No. 556 at 9 (filed in Docket No. QF17-454-000) (Broadview 2016 Form No. 556).

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maintaining the net power production capacity of 80 MW.¹⁸ On September 11, 2019, Broadview applied for Commission certification that Broadview's proposed facility is a small power production QF. Broadview's accompanying Form No. 556 revised the facility's maximum gross power production capacity down to 82.548 MW to reflect the facility's design capabilities, including limiting elements, while maintaining the previously documented maximum net power production capacity of 80 MW.¹⁹ On January 29, 2020, Broadview filed a revised Form No. 556 to reflect the same revised maximum gross power production capacity of 82.548 MW.²⁰ Across all of Broadview's filings, it consistently reported a net power production capacity of 80 MW to be delivered to NorthWestern's system.

7. Under PURPA and the Commission's regulations, the "power production capacity" of a small power production QF may not exceed 80 MW.²¹ In the September 2020 Order, based on the record in this proceeding, the Commission reconsidered its previous, longstanding interpretation that a facility's "power production capacity" is determined by the facility's "maximum net output" or "send out."²² The Commission described its precedent under the "send out" analysis as allowing "design capabilities that may incidentally or occasionally cross PURPA's 80 MW threshold due to certain components or variances, such as fuel or ambient temperature."²³ The Commission observed that there was a "significant difference" between facilities that may incidentally or occasionally exceed 80 MW and a facility "purposefully designed with a 160-MW solar array."²⁴ Upon reconsidering the "send out" analysis and the potential that it creates for the approval of "projects that do not comply with the plain language of PURPA," the Commission concluded that it has improperly focused on "output" and "send out" instead of on "power

¹⁸ Broadview Solar LLC March 13, 2019, Form No. 556 at 9 (filed in Docket No. QF17-454-003) (Broadview 2019 Form No. 556).

¹⁹ Broadview 2019 Application at 9.

²⁰ Broadview Solar LLC January 29, 2020 Form No. 556 (filed in Docket No. QF17-454-005) (Broadview 2020 Form No. 556).

²¹ 16 U.S.C. § 796(17)(A)(ii); 18 C.F.R. § 292.204(a)(1) (2020).

²² September 2020 Order, 172 FERC ¶ 61,194 at PP 18-23 (citing *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231 (1981) (*Occidental*); *Malacha Power Project, Inc.*, 41 FERC ¶ 61,350 (1987) (*Malacha*); *Am. Ref-Fuel Co. of Bergen Cty.*, 54 FERC ¶ 61,287 (1991)).

²³ September 2020 Order, 172 FERC ¶ 61,194 at P 21.

²⁴ *Id.*

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production capacity,” which is the standard established both in the statute and in the Commission’s regulations.²⁵ The Commission stated that in the factual context of Broadview’s proposed facility, these concepts are not the same.²⁶ This led the Commission to conclude that the “send out” analysis first applied in *Occidental* is inconsistent with the 80-MW “power production capacity” limit for small power production QFs, based on the Commission’s reading of the statute and the Commission’s regulations.²⁷

8. In support of this conclusion, the Commission noted that the reporting formula in Form No. 556 starts with the facility’s “maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions.”²⁸ The reporting formula then subtracts an exclusive list of parasitic loads and losses to yield “the facility’s maximum net power production capacity” which the Commission described as “the facility’s ultimate certified capacity.”²⁹

9. The Commission found that because the inverters at Broadview’s facility impose a conversion limit or output limit rather than a limit on the solar PV array’s power production capacity of 160 MW, Broadview could not meet the 80-MW statutory limit for “power production capacity.”³⁰ The Commission explained that it did not view Form No. 556 as including adjustments for inverters or other output-limiting devices in the reported “maximum gross power production capacity.”³¹

II. Discussion

A. Procedural Matters

10. Within the 30-day period to file a request for rehearing, the Commission received five late motions to intervene and requests for rehearing or clarification from NewSun Energy, LLC; Pine Gate Renewables, LLC; the Solar Energy Industries Association;

²⁵ *Id.* P 23 (citing 16 U.S.C. § 796(17)(A)(ii); 18 C.F.R. § 292.204(a)(1)).

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.* PP 24-25.

²⁹ *Id.* P 24.

³⁰ *Id.* P 25.

³¹ *Id.*

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Southern Current, LLC; and TerraForm Power, LLC.³² On October 13, 2020, NorthWestern filed an answer to the late motions to intervene.

11. In ruling on late motions to intervene, we apply the criteria set forth in Rule 214(d) of the Commission's Rules of Practice and Procedure.³³ We consider, among other factors, whether the movants had good cause for failing to file the motion within the time prescribed.³⁴ The Commission considers whether the movants explain why they should not be held to the Commission's expectation that entities should intervene "in a timely manner based on reasonably foreseeable issues arising from the applicant's filing and the Commission's notice of the proceeding."³⁵

12. Here, the movants seek to intervene one year after the original deadline in the underlying proceeding of October 2, 2019.³⁶ They claim that there was no indication in this proceeding that the Commission would overturn the line of precedent that began with *Occidental* in 1981.³⁷ NewSun Energy, the Solar Energy Industries Association, Southern Current, and TerraForm Power emphasize that, while Broadview's application was pending, the Commission separately began and completed a rulemaking in Docket No. RM19-15-000 to revise the Commission's PURPA-implementing regulations,

³² See *supra* note 5.

³³ 18 C.F.R. § 385.214(d) (2020).

³⁴ *Id.* § 385.214(b)(3), (d)(i). Other factors include the potential disruption caused by such late intervention, whether the movants' interest are not adequately represented by other parties, and any prejudice to existing parties. *Id.* § 385.214(d)(ii)-(iv).

³⁵ *Tenn. Gas Pipeline Co., L.L.C.*, 162 FERC ¶ 61,167, at P 51 (2018) (citing *Alcoa Power Generating, Inc.*, 144 FERC ¶ 61,218, at P 13 (2013)); see also *Idaho Power Co.*, 171 FERC ¶ 61,238, at PP 16-17 (2020).

³⁶ See *Combined Notice of Filings*, 84 Fed. Reg. 49,291, 49,292 (Sept. 19, 2019) (publishing notice of Broadview's application to recertify its proposed facility and requiring that any person desiring to intervene or protest must file to do so by October 2, 2019).

³⁷ See, e.g., NewSun Energy, LLC October 1, 2020 Motion for Late Intervention and Petition for Rehearing at 2-3; Pine Gate Renewables, LLC October 1, 2020 Motion to Intervene Out-of-Time, Request for Rehearing, or in the Alternative, Clarification at 1-4; Solar Energy Indus. Ass'n September 28, 2020 Motion to Intervene Out-of-Time at 2-3; Southern Current, LLC October 1, 2020 Motion to Intervene Out-of-Time at 2-3; Terraform Power, LLC October 1, 2020 Motion to Intervene Out-of-Time and Request for Clarification, or in the Alternative, Limited Rehearing at 4-5.

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including some aspects of the size limit for QFs,³⁸ but that the Commission gave no indication that it would revise how it calculates a facility’s “power production capacity.”³⁹ All of the movants seeking late intervention state that they will accept the record as it stands,⁴⁰ that they represent interests not adequately represented by the other parties in the proceeding, and that permitting their late intervention will not prejudice or burden the existing parties.⁴¹

13. In its answer, NorthWestern contends that the late movants’ motions to intervene should be denied as they adopted a wait-and-see approach in this proceeding and do not meet the higher burden for demonstrating good cause for late intervention at the rehearing stage.⁴² NorthWestern notes that Broadview’s application explicitly identified the “send out” analysis first established in *Occidental* as the primary authority for Broadview’s facility to obtain QF status. Given this framing, NorthWestern states that it was not unforeseeable that the Commission might disagree with the applicability of the “send out” line of cases to a solar PV-based facility. According to NorthWestern, the Commission was not required to go beyond its public notice of Broadview’s application in the Federal Register, to instead provide notice of the full range of possible outcomes to the case or to

³⁸ See, e.g., *Qualifying Facility Rates and Requirements*, Order No. 872, 85 Fed. Reg. 54,638, 54,702-03 (Sept. 2, 2020), 172 FERC ¶ 61,041, at PP 515-24 (2020), (discussing the aggregation of affiliated small power production QFs based on proximity of “electrical generating equipment”).

³⁹ NewSun Energy, LLC October 1, 2020 Motion for Late Intervention and Petition for Rehearing at 3; Solar Energy Indus. Ass’n September 28, 2020 Motion to Intervene Out-of-Time at 2-3; Southern Current, LLC October 1, 2020 Motion to Intervene Out-of-Time at 2-3; Terraform Power, LLC October 1, 2020 Motion to Intervene Out-of-Time and Request for Clarification, or in the Alternative, Limited Rehearing at 4-5.

⁴⁰ Having said that, however, they all also seek reconsideration of the Commission’s earlier order, indicating that they, in fact, do not accept the record developed prior to their motions for late intervention. See 18 C.F.R. § 385.214(d)(3)(ii) (2020).

⁴¹ NewSun Energy, LLC October 1, 2020 Motion for Late Intervention and Petition for Rehearing at 3-4; Pine Gate Renewables LLC, October 1, 2020 Motion to Intervene Out-of-Time, Request for Rehearing, or in the Alternative, Clarification at 4; Solar Energy Indus. Ass’n September 28, 2020 Motion to Intervene Out-of-Time at 3; Southern Current, LLC October 1, 2020 Motion to Intervene Out-of-Time at 3; Terraform Power, LLC October 1, 2020 Motion to Intervene Out-of-Time and Request for Clarification, or in the Alternative, Limited Rehearing at 5.

⁴² NorthWestern October 13, 2020 Answer at 6-9.

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provide these specific movants with actual notice.⁴³ NorthWestern notes that the Commission has discretion to make policy decisions through rulemakings, policy statements, or case-by-case adjudication and that *Occidental* is an example of the Commission making a policy decision in an adjudication.⁴⁴ Responding to the late movants' claims that they represent interests not adequately represented by the other parties in the proceeding, NorthWestern notes that all movants are either solar QF developers or representatives of QF developers whose interests are already represented by Broadview as a solar QF developer.⁴⁵ NorthWestern points out that NewSun attempts to add facts to the record.

14. Courts have recognized that “the Commission has steadfastly and consistently held that a person who has actual or constructive notice that his interests might be adversely affected by a proceeding, but who fails to intervene in a timely manner, lacks good cause under Rule 214.”⁴⁶ Entities interested in becoming a party to Commission proceedings may not “sleep on their rights” and wait to see how issues might evolve before deciding whether to intervene to protect their interests.⁴⁷ As the Commission has explained, “[w]hen late intervention is sought after the issuance of a dispositive order, the prejudice to other parties and burden upon the Commission of granting the late intervention may be substantial.”⁴⁸ In such circumstances, movants bear a higher burden to demonstrate good

⁴³ *Id.* at 7.

⁴⁴ *Id.* at 7-8.

⁴⁵ *Id.* at 8-9.

⁴⁶ See, e.g., *Cal. Trout v. FERC*, 572 F.3d 1003, 1022 (9th Cir. 2009).

⁴⁷ See, e.g., *Broadwood Landing, LLC*, 126 FERC ¶ 61,035, at PP 11, 16 (2009) (denying late intervention to movant who claimed that scientific studies made it more aware of its interests in the proceeding); *Cent. Neb. Pub. Power & Irrigation Dist.*, 125 FERC ¶ 61,192, at P 12 (2008) (“The Commission expects parties to intervene in a timely manner based on the reasonably foreseeable issues arising from the applicant’s filings and the Commission’s notice of proceedings.”); *Broadwater Energy, LLC*, 124 FERC ¶ 61,225, at P 13 (2008) (“Those entities with interests they intend to protect are not entitled to wait until the outcome of a proceeding and then file a motion to intervene once they discover the outcome conflicts with their interests.”).

⁴⁸ *Nat'l Fuel Gas Supply Corp.*, 139 FERC ¶ 61,037, at P 18 (2012) (*National Fuel*); see also, e.g., *Fla. Gas Transmission Co.*, 133 FERC ¶ 61,156, at P 6 (2010).

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cause for granting the late intervention,⁴⁹ and generally it is Commission policy to deny late intervention at the rehearing stage.⁵⁰

15. The movants fail to demonstrate good cause for their delay. We are not persuaded by the claim that the movants had inadequate notice that the outcome of this proceeding could affect their interests. Broadview proposed a facility with a 160 MW solar PV array (and also a 200 MWh battery energy storage facility) and noted its reliance on *Occidental* in its application.⁵¹ Movants do not explain why they could not have sought to intervene prior to the Commission's September 2020 Order here, where the pleadings of the parties filed between October 2019 and March 2020 addressed the parties' dispute concerning the Commission's methodology for determining a facility's "power production capacity" and specifically discussed *Occidental*.⁵² We conclude that the movants have not satisfied the higher burden to demonstrate good cause for their delay in seeking intervention until after the issuance of a dispositive order.

16. When the Commission determines that good cause does not exist, it is not obligated to consider Rule 214's remaining factors.⁵³ Accordingly, we deny NewSun Energy,

⁴⁹ See, e.g., *Big Rivers Elec. Corp. v. Midcontinent Indep. Sys. Operator, Inc.*, 161 FERC ¶ 61,225, at P 12 (2017); *Cal. Dep't of Water Res. & the City of Los Angeles*, 120 FERC ¶ 61,057, at P 8 n.3, reh'g rejected, 120 FERC ¶ 61,248 (2007), aff'd sub nom., *Cal. Trout v. FERC*, 572 F.3d 1003 (9th Cir. 2009) (*Cal. Trout*).

⁵⁰ See *PennEast Pipeline Co.*, 162 FERC ¶ 61,279 (2018) (denying two motions for late intervention and rejecting requests for rehearing filed 20 and 27 days after the Commission issued a certificate order for the PennEast Project); *Tenn. Gas Pipeline Co., L.L.C.*, 162 FERC ¶ 61,013, at P 10 (2018) (denying late motions to intervene and rejecting requests for rehearing filed two weeks and thirteen months after the Commission issued a certificate order for the Connecticut Expansion Project); *National Fuel*, 139 FERC ¶ 61,037 at PP 18-19 (denying a late motion to intervene and request for rehearing filed 30 days after the Commission issued a certificate order for the Northern Access Project).

⁵¹ See Broadview 2019 Application at 3-5, 8.

⁵² E.g., Broadview 2019 Application at 3-5, 8; NorthWestern October 2, 2019 Motion to Intervene and Protest at 6; EEI October 2, 2019 Motion to Intervene and Protest at 2; Broadview October 17, 2020, Motion for Leave to Answer and Answer at 7-8; NorthWestern November 1, 2019 Motion for Leave to Answer and Answer at 3; Broadview November 5, 2019 Motion for Leave to Answer and Answer at 2.

⁵³ See *Power Co. of Am., L.P. v. FERC*, 245 F.3d 839, 843 (D.C. Cir. 2001); see also *Cal. Trout*, 572 F.3d at 1023.

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LLC's; Pine Gate Renewables, LLC's; the Solar Energy Industries Association's; Southern Current, LLC's; and TerraForm Power, LLC's late motions to intervene.

17. Under FPA section 313(a) and Rule 713(b) of the Commission's Rules and Practice and Procedure, only a party to a proceeding may request rehearing of a final Commission decision.⁵⁴ Because NewSun Energy, LLC; Pine Gate Renewables, LLC; the Solar Energy Industries Association; Southern Current, LLC; and TerraForm Power, LLC are not parties to this proceeding, we reject their requests for rehearing of the September 2020 Order.

18. However, we also note that, in setting aside the September 2020 Order and determining that Broadview's facility meets the requirements for certification as a small power production QF, as discussed below, we have addressed the movants' concerns articulated in their late motions to intervene and requests for rehearing.

B. Substantive Matters

19. On rehearing, Broadview argues that the Commission failed to provide a principled explanation for overturning the Commission's longstanding "send out" analysis of "power production capacity," which Broadview describes as focusing on the amount of power that the entire facility can provide at the point of interconnection to the grid.⁵⁵ Broadview states that the Commission erred by adopting a "component-by-component" approach to determining "power production capacity," which Broadview describes as focusing on the capability of each individual component of a generating facility.⁵⁶ Broadview claims that this new "component-by-component" approach is inconsistent with PURPA.⁵⁷ Broadview claims that the Commission's focus on "the DC capability of a single component of the facility" is misguided and unsupportable given that the DC power is not a form of power that can be transmitted on the grid.⁵⁸ Broadview asserts that the Commission erred by dismissing the inverters as "output-limiting devices," even though the Commission accounts for the fact that the lowest-capacity component of other types of generating facilities imposes a "send out" limit on the entire facility's output.⁵⁹

⁵⁴ 16 U.S.C. § 825l(a); 18 C.F.R. § 385.713(b).

⁵⁵ Broadview Rehearing Request at 1-3, 8, 12-14, 17-21.

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.* at 6.

⁵⁹ *Id.* at 6, 7, 18 (noting examples of a biomass energy facility that pairs an off-the-shelf boiler capable of producing steam to generate 100 MW and a turbine-generator rated

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20. Upon further consideration, we set aside the September 2020 Order. Broadview's application, and the protests from NorthWestern and Edison Electric Institute (EEI), presented the first occasion for the Commission to interpret how PURPA's 80 MW limitation on a qualifying small power production facility's "power production capacity" applies to a facility such as Broadview's. We find that, in denying Broadview's application, the Commission erred by departing from and overturning its longstanding precedent. On rehearing, we conclude that Broadview's proposed facility meets PURPA's requirements for a qualifying small power production facility, as discussed below.

1. PURPA and the Commission's Send-Out Analysis

21. Under PURPA, a "qualifying small power production facility" means a facility:

[that] produces electric energy solely by the use, as a primary energy source, of biomass, waste, renewable resources, geothermal resources, or any combination thereof;⁶⁰

[that] has a power production capacity which, together with any other facilities located at the same site (as determined by the Commission), is not greater than 80 megawatts,⁶¹ and

that the Commission determines, by rule, meets such requirements (including requirements respecting fuel use, fuel efficiency, and reliability) as the Commission may, by rule, prescribe.⁶²

For a facility with "qualifying" status, Congress conferred additional rights, most importantly mandatory purchase and sale obligations on electric utilities.

22. Specifically, Congress directed the Commission to prescribe "such rules as it determines necessary to encourage ... small power production" including to "require electric utilities to offer to (1) sell electric energy to qualifying cogeneration facilities and qualifying small power production facilities and (2) purchase electric energy from such

to 80 MW, or a wind energy facility that pairs blades sized to produce over 80 MW and a turbine-generator rated to 80 MW).

⁶⁰ 16 U.S.C. § 796(17)(A)(i) (2018) (defining "small power production facility").

⁶¹ *Id.* § 796(17)(A)(i)(ii).

⁶² *Id.* § 796(17)(C).

facilities.”⁶³ The rates for these sales or purchases must be just and reasonable and must not discriminate against QFs.⁶⁴ The rates for utility purchases from QFs cannot exceed “the cost to the electric utility of the electric energy which, but for the purchase from such cogenerator or small power producer, such utility would generate or purchase from another source.”⁶⁵

23. PURPA, however, neither defines the terms “facility” and “power production capacity,” nor explains how the Commission is supposed to ascertain the “power production capacity” of any particular “facility.” Nor do those terms have commonly understood meanings that, taken together, speak directly to the specific question⁶⁶ before us: namely, how to measure the power production capacity of a facility whose generating subcomponents (e.g., solar panels) have a nameplate capacity of greater than 80 MW, but which is physically incapable of producing more than 80 MW for sale to the interconnected electric utility at any one point in time.⁶⁷ For example, the Commission could, as Commissioner Danly advocates, look only to generating subcomponents when evaluating power production capacity.⁶⁸ Alternatively, the Commission could, as it has for nearly

⁶³ 16 U.S.C. § 824a-3(a).

⁶⁴ 16 U.S.C. § 824a-3(b), (c).

⁶⁵ 16 U.S.C. § 824a-3(b), (d).

⁶⁶ See *S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41, 54 (D.C. Cir. 2014) (“If the court determines ‘Congress has directly spoken to the *precise* question at issue,’ and ‘the intent of Congress is clear, that is the end of the matter.’”) (emphasis added) (quoting *Chevron U.S.A. Inc. v. Nat. Resources Def. Council, Inc.*, 467 U.S. 837, 842 (1984)).

⁶⁷ We note that, because the statutory 80 MW limit is expressed in MW of capacity, not MWh of energy, no more than 80 MW may permissibly be put to the utility at any one time.

⁶⁸ Commissioner Danly’s dissent suggests that the statute is unambiguous because each of the words “power,” “production,” and “capacity” have a plain meaning and that those terms compel us to adopt the nameplate capacity of Broadview’s solar array as its power production capacity. Dissent at P 13. Elsewhere in his dissent, however, he endorses the Commission’s send-out analysis, at least in certain circumstances not present here. Dissent at P 31. But the send-out analysis, by its very terms, rejects reliance on nameplate, or nominal, capacity. In other words, the send-out test contemplates that a resource’s generating subcomponents can have a nameplate capacity greater than 80 MW. Otherwise, there would be no need to look to the resource’s power production capacity net of parasitic load, line losses, and other essential electricity uses. The tension in those

forty years,⁶⁹ look to the maximum output that the facility can produce for the electric utility after accounting for all the constituent parts that make up the facility, which in this case includes the inverters. This latter approach would view power sent to or consumed by the various components of the facility as inputs to the calculation of the facility’s power production capacity. In light of those multiple interpretations, we find that the statute is ambiguous as to how the Commission is to measure a facility’s power production capacity,⁷⁰ and, as explained below, we find that the latter approach is the best reading of the statute.

24. As an initial matter, we believe that the statute’s emphasis on the “power production capacity” of the “facility” supports the latter approach, in which power production capacity is measured based on what the facility can actually produce for sale to the interconnected electric utility. After all, the term “facility” is best read to include all components of a particular structure as whole, not any of its individual parts.⁷¹ Focusing only on the solar panels in this instance would ignore the commonly understood meaning of the term facility without any textual indication that Congress intended us to do so.

25. Although Commissioner Danly seeks to draw a bright line distinction between “production” and “delivery,” these terms are overlapping, at least in this context. As

conflicting positions only underscores the extent to which the statute does not unambiguously address the question before us.

⁶⁹ As discussed below, the Commission first adopted this so-called “send-out” approach in 1980.

⁷⁰ See *Robinson v. Shell Oil Co.*, 519 U.S. 337, 340 (1997) (*Robinson*) (If any of the statute’s terms are subject to more than one reasonable interpretation, the language is ambiguous, and the Court looks beyond the statute’s terms to determine Congress’s intent in enacting the law); *Automated Power Exch., Inc. v. FERC*, 204 F.3d 1144, 1151 (D.C. Cir. 2000) (finding that the “phrase ‘facilities ... for [wholesale] sale’ of electricity admits of more than one meaning” and, ultimately, that FERC’s reasonable interpretation of the ambiguous language warranted deference).

⁷¹ See, e.g., *facility*, Merriam Webster Dictionary, <https://www.merriam-webster.com/dictionary/facility> (last visited Mar. 1, 2021) (defining a facility, for these purposes, as “something (such as a hospital) that is built, installed, or established to serve a particular purpose”); *facility*, North American Electric Reliability Corporation, *Glossary of Terms Used in NERC Reliability Standards* (Jan. 4, 2021), https://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf (defining facility as “a set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.”)).

Commissioner Danly recognizes, the term “capacity” is generally equated to “output.”⁷² As applied to just the facility’s solar panels in this instance, output could be read to refer to the raw quantity of electricity generated. But when applied to the facility as a whole, as PURPA requires, power sent from the solar panels to other internal components, rather than to the grid, cannot properly be considered the output of the facility.

26. That interpretation is further confirmed when we consider the terms “facility” and “power production capacity” in light of “their context and with a view to their place in the overall statutory scheme.”⁷³ The purpose of PURPA’s 80 MW “power production capacity” limitation is to reserve the benefits of QF status for only certain types of facilities. When a facility meets the QF requirements, the benefits of that status—e.g., the right to interconnect with the relevant electric utility and sell the facility’s output to that utility at an avoided-cost rate⁷⁴—accrue to the facility as a whole. Given that statutory structure, and the importance of the rights at the point of interconnection, we find that the best interpretation of the 80-MW limit on a facility’s power production capacity is as a limit on the facility’s net output to the electric utility (i.e., at the point of interconnection), taking into account all components necessary to produce electric energy in a form useful to an interconnected entity. This interpretation aligns the 80-MW limitation with the mandatory obligations and interconnection rights that are the foundation of Congress’s efforts to “encourage” QF development under PURPA.⁷⁵

⁷² Dissent at P 13 n.22.

⁷³ *Davis v. Mich. Dep’t of Treasury*, 489 U.S. 803, 809 (1989) (“[S]tatutory language cannot be construed in a vacuum. It is a fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme.”). See *Graham Cty. Soil & Water Conservation Dist. v. U.S. ex rel. Wilson*, 559 U.S. 280, 290 (2010) (quoting *Gustafson v. Alloyd Co.*, 513 U.S. 561, 568 (1995)) (“Courts have a duty to ‘construe statutes, not isolated provisions.’”); *Johnson v. United States*, 559 U.S. 133, 139 (2010) (“Ultimately, context determines meaning.”); *Gen. Dynamics Land Sys. v. Cline*, 540 U.S. 581, 596 (2004) (It is a “cardinal rule that statutory language must be read in context [since] a phrase gathers meaning from the words around it.” (quotations omitted)); *Robinson*, 519 U.S. 337 at 341 (We look to “the language itself, the specific context in which that language is used, and the broader context of the statute as a whole.”).

⁷⁴ See, e.g., 18 C.F.R. § 292.303(a), (c).

⁷⁵ See, e.g., 16 U.S.C. § 824a-3(a). Where Congress did not wish to limit a facility’s net output to the electric utility, as in the case for “qualifying cogeneration facilities,” Congress did not impose a power production capacity limit. E.g., 16 U.S.C. § 796(18)(A),

27. The Commission's early proceedings applying its PURPA regulations were consistent with this interpretation that "power production capacity" is best understood as the amount of power that a facility is capable of safely and reliably sending to the interconnecting utility. In formulating the "send out" test in *Occidental*,⁷⁶ the Commission recognized that while the nominal rating of a facility's generating equipment may exceed 80 MW, it is "the maximum net output of the facility which can be safely and reliably achieved under the most favorable operating conditions likely to occur over a period of several years" that determines the facility's "power production capacity".⁷⁷ The Commission further explained that "the nominal rating of even a key component of the facility" is not necessarily determinative because, for example, "it is not uncommon for smaller facilities to find it most economic to employ commercially available components some of which have individual capabilities significantly exceeding the overall facility capability."⁷⁸

28. The Commission stated that the net output of a facility is "its send out after subtraction of the power used to operate auxiliary equipment in the facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and excitors) and for other essential electricity uses in the facility from the gross generator output."⁷⁹ Because the Commission explicitly focused on the overall facility capabilities, *Occidental* supports the proposition that power production capacity means output in a form useful to an interconnected entity. The Commission's subsequent applications of the *Occidental* approach likewise reflect that the owner or operator of a facility should not be allowed to obtain the benefits of QF status for more than the facility's net output because only the

(B) (defining "qualifying cogeneration facility" based on the nature of its output but not, as with a qualifying small power production facility, based on its power production capacity).

⁷⁶ Commissioner Danly characterizes today's order as establishing a new test, which he dubs the "for delivery to the utility" standard. Dissent at P 9. We disagree. As discussed below, in the four decades since the Commission first adopted the send-out test in *Occidental*, it has consistently measured a QF's power production capacity at the point of interconnection with the interconnecting electric utility. See *infra* PP 27-29. That the Commission is applying that long-established standard to new facts presented by Broadview's application does not turn it into a new standard.

⁷⁷ *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231 at 61,445.

⁷⁸ *Id.* at 61,444-45.

⁷⁹ *Id.*

amount of the net output will be capable of being avoided on an interconnected utility's system.⁸⁰

29. The Commission reinforced that reasoning in *Malacha Power Project, Inc.*,⁸¹ in which the Commission again concluded that "power production capacity" is determined from the facility's net output after taking into account all components necessary to produce electric energy in a form useful to an interconnected entity. In *Malacha*, the Commission addressed the issue of whether "certain interconnection equipment required for the transmission of the electric power produced by the facility to [the purchasing utility's] transmission system will be part of the qualifying small power production facility."⁸² The Commission held that the interconnection equipment can be included as "auxiliary equipment in the facility necessary for power generation."⁸³ The Commission also determined that, when interconnection equipment is included, the power production capacity of the facility is determined not at the facility's powerhouse substation but at the point of interconnection with the purchasing utility's transmission system, after deducting losses resulting from transmission over the interconnection equipment.⁸⁴ That is, the facility's power production capacity was determined after taking into consideration all of the components of the facility, including components necessary for interconnection.

30. The Commission codified *Malacha* in a 1995 rulemaking. There, the Commission updated the definition of "qualifying facility" to include certain "transmission lines and other equipment used for interconnection purposes (including transformers and switchyard

⁸⁰ E.g., *Accord Power Developers, Inc.*, 32 FERC at 61,276 (reasoning from *Occidental*'s focus on net output that QF sales are limited to net output, otherwise "the QF would be receiving avoided cost prices for an amount of power that it does not enable the utility to avoid generating or purchasing); *Penntech Papers, Inc.*, 48 FERC at 61,423 (explaining that for a cogeneration QF, an economic distortion may result if the Commission were to grant certification for the facility's maximum rated capacity and allow Penntech to sell gross output at one utility's avoided cost rates while the cogenerator purchases its needed auxiliary power, which is properly an internal cost of the facility, at another utility's retail rates); *Turners Falls*, 53 FERC at 61,225-26 (denying proposal to certify and sell a facility's gross output even though the facility would purchase its auxiliary power from utilities, again focusing on the proposed facility's "net capability").

⁸¹ *Malacha*, 41 FERC ¶ 61,350.

⁸² *Id.* at 61,945.

⁸³ *Id.* at 61,946.

⁸⁴ *Id.*

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equipment).⁸⁵ In that rule, the Commission explained that such equipment was part of the “facility” if it was used to transmit the QF’s power output to the interconnecting utility or to transmit the interconnected utility’s supplementary, standby, maintenance and backup power to the QF.⁸⁶ In so doing, Order No. 575 further underscored the Commission’s view that a qualifying facility includes all components necessary to produce electric energy in a form useful to an interconnected entity—an interpretation that is consistent with the send-out analysis insofar as it supports measuring a “facility’s” “power production capacity” based on the power that the facility can deliver to the interconnected utility.

31. At the same time in 1995, the Commission introduced the first version of Form No. 556, which standardized the information to be included in a self-certification of QF status or an application for Commission certification of QF status. Specifically, Line 4a of Form No. 556 required a filer to “describe the principal components of the facility including boilers, prime movers and electric generators, and explain their operation.”⁸⁷ In 2010, the Commission transferred and expanded the required description of primary components into Line 7h of Form No. 556. It requires a filer to “identify all … electrical generators, photovoltaic solar equipment, … and/or other primary power generation equipment used in

⁸⁵ *Streamlining of Regulations Pertaining to Parts II and III of the Federal Power Act and the Public Utility Regulatory Policies Act of 1978*, Order No. 575, FERC Stats. & Regs. ¶ 31,014 at 31,279-81 (1995) (cross-referenced at 70 FERC ¶ 61,022); *id.* FERC Stats. & Regs. ¶ 31,014 at 31,279 n.46 (citing *Clarion Power Co.*, 39 FERC ¶ 61,317 (1987); *Kern River Cogeneration Co.*, 31 FERC ¶ 61,183 (1985); *Malacha*, 41 FERC ¶ 61,350; *Oxbow Geothermal Corp.*, 67 FERC ¶ 61,193 (1994)); 18 C.F.R. § 292.101(b)(1)(i)-(iii).

⁸⁶ 18 C.F.R. § 292.101(b)(i)-(iii); *see* Order No. 575, FERC Stats. & Regs. ¶ 31,014 at 31,280. (explaining that included transmission lines and interconnection equipment “may be used only for the purpose of effectuating the QF’s sale of power” or to otherwise “serve the same users that are served by the power production components of the QFs, to serve other QFs, and to serve the backup, etc. needs of the QF, and its thermal host, in appropriate circumstances.”). The regulation also includes equipment used to transmit power to or from the utility on behalf of other QFs. 18 C.F.R. § 292.101(b)(1)(i)(C).

⁸⁷ Order No. 575, 60 Fed. Reg. 4831 at 4855.

the facility”⁸⁸ and describe “how the components operate as a system.”⁸⁹ The text and structure of Form No. 556 show a focus on how a facility’s principal components, which have been clarified to include photovoltaic solar equipment (not merely panels), operate together.

32. Based on the analysis above, we conclude that Broadview’s facility will conform to the size limit for a qualifying small power production facility established in PURPA and the Commission’s regulations. To be sure, Broadview’s facility is distinct in certain respects from the facilities that the Commission considered when it first applied the “send out” test. Nevertheless, on reconsideration, we do not believe that those differences, including the presence of a 200-MWh battery energy storage system and a 160-MW solar array, are material for the purposes of determining whether Broadview’s “facility” has a “power production capacity” of no more than 80 MW. Although Broadview’s configuration allows it to more consistently deliver a higher share of the 80 MW power production capacity, that configuration does not change the fact that the Broadview facility is not actually capable of providing more than 80 MW at any one point in time at its point of interconnection with NorthWestern. On reconsideration, we find that while this effectively increases the Broadview facility’s capacity factor,⁹⁰ it does not change the Broadview facility’s “power production capacity” or call into question our longstanding reliance on the “send out” analysis to measure power production capacity.

⁸⁸ *Revisions to Form, Procedures, and Criteria for Certification of Qualifying Facility Status for a Small Power Production or Cogeneration Facility*, Order No. 732, 130 FERC ¶ 61,214, (2010), at appendix A – Proposed FERC Form No. 556, Line 7h (emphasis added). The current version of Form No. 556 uses identical text at Line 7h. Form No. 556, <https://www.ferc.gov/media/form-no-556> (OMB Control # 1902-0075, Expiration Nov. 30, 2022).

⁸⁹ *Id.*

⁹⁰ See, e.g., *capacity factor*, U.S. Energy Information Administration, *Glossary*, <https://www.eia.gov/tools/glossary/index.php?id=C> (last visited Mar. 3, 2021) (defining capacity factor as “the ratio of the electrical energy produced by a generating unit for the period of time considered to the electrical energy that could have been produced at continuous full power operation during the same period”). See also, e.g., Dykes et al., National Renewable Energy Laboratory, *Opportunities for Research and Development of Hybrid Power Plants*, at 41 (May 2020) (noting that “[i]f it is valuable to maximize the interconnection capacity factor, the system may be oversized on the DC side to generate more power during off-peak hours and clip or store the power during hours of overproduction, relative to inverter capacity”).

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33. Likewise, consistent with *Malacha*, we further find that it is reasonable to measure power production capacity of a facility like Broadview's at the point of interconnection because its inverters are an integral part of a solar PV facility's generation equipment and are necessary to produce power in a form useful to the interconnecting utility.⁹¹ Indeed any solar-PV QF can produce power for delivery to the purchasing utility only to the extent enabled by the inverters because the grid operates predominantly using AC power.⁹² Without the inverters, a solar PV QF cannot benefit from its rights to interconnect and exchange power with an electric utility, as Congress intended to “encourage the development of cogeneration and small power production facilities” by addressing ‘problems imped[ing] the development of nontraditional generating facilities.’⁹³ Because Broadview's facility—including the PV panels, inverters, and the battery system—can deliver a maximum of 80 MW of power to NorthWestern's system at any one point in time,⁹⁴ the power production capacity of Broadview's facility cannot and will not exceed 80 MW.

2. The Certification Filing

34. Upon further consideration of the arguments on rehearing, we conclude that Broadview Solar has satisfied our regulatory requirements for Commission certification of QF status.

35. Before 2006, the QF status of a small power production facility depended only on the facility's conformance to the regulatory requirements about maximum size and primary

⁹¹ E.g., Broadview Rehearing Request at 9-10, 18 (discussing inverters).

⁹² Broadview's interconnection agreement with NorthWestern provides that the total size of the “[p]roject will be 80 MW based on the max output of the inverters.” Broadview October 17, 2019 Answer at 4.

⁹³ E.g., *Conn. Valley Elec. Co., Inc. v. FERC*, 208 F.3d 1037, 1045 (D.C. Cir. 2000) (quoting *FERC v. Miss.*, 456 U.S. 742, 750 (1982)). 16 U.S.C. § 824a-3 (“the Commission shall prescribe, and from time to time thereafter revise, such rules as it determines necessary to encourage cogeneration and small power production”). Congress sought to encourage the development of QFs to provide electricity to a transmission system that had operated on AC power since the turn of the twentieth century.

⁹⁴ Lending further support to that conclusion, the interconnection studies executed by NorthWestern, the interconnecting utility, identify Broadview's summer and winter output as 80 MW, and the interconnection agreement, provides that the total size of the “Project will be 80 MW based on the max output of the inverters.” Broadview October 17, 2019 Answer at 4.

energy source, as interpreted in Commission precedent.⁹⁵ The Commission noted that QFs and purchasing utilities could agree that a generation facility met the requirements for QF status, and the facility would qualify for PURPA benefits without making any filing with the Commission.⁹⁶ In 2006, the Commission added the requirement that the owner or operator must make a certification filing, either by filing for self-certification or filing an application for Commission certification.⁹⁷ Both approaches involve filing a Form No. 556 (which was introduced earlier, in 1995).⁹⁸

36. Form No. 556 was always intended to be a flexible tool for a facility owner or operator to submit information relevant to whether a facility meets the requirements to be considered a QF. The form does not supplant Commission precedent regarding the requirements that a facility must satisfy to secure QF status. For that reason, we conclude that the Commission erred in the September 2020 Order by relying on particular lines of Form No. 556 to support its decision to overturn the “send out” line of precedent. In addition, as discussed below, we find that the Commission also overlooked the extent to which the pragmatic approach it has always taken with respect to Form No. 556 can be consistent with our “send out” precedent.

37. When the Commission published the first version of Form No. 556 in 1995, it sought to incorporate a standardized form into the regulations to save developers from

⁹⁵ *Revisions to Form, Procedures, and Criteria for Certification of Qualifying Facility Status for a Small Power Production or Cogeneration Facility*, Order No. 732, 130 FERC ¶ 61,214, at PP 34, 37 (reviewing historical context); *Small Power Production and Cogeneration Facilities – Qualifying Status*, Order No. 70, FERC Stats. & Regs. ¶ 30,134, at 30,937-38, 30,954-55 (cross-referenced at 10 FERC ¶ 61,230) (rejecting a proposal to require Commission certification of all facilities seeking QF status, instead providing that facilities that met the requirements for QF status needed only to furnish an informational notice to the Commission of QF status).

⁹⁶ *Revisions to Form, Procedures, and Criteria for Certification of Qualifying Facility Status for a Small Power Production or Cogeneration Facility*, 129 FERC ¶ 61,034, at P 8 (2009) (NOPR for Order No. 732).

⁹⁷ *Revised Regulations Governing Small Power Production and Cogeneration Facilities*, Order No. 671, 114 FERC ¶ 61,102, *order on reh’g*, Order No. 671-A, 115 FERC ¶ 61,225 (2006); 18 C.F.R. § 292.207(a) (self-certification); *id.* § 292.207(b) (application for Commission certification).

⁹⁸ 18 C.F.R. § 292.207(a), (b)(2).

having to examine the Commission’s regulations and precedent to certify.⁹⁹ Form No. 556 required a report of the “power production capacity” of a facility in compliance with the approach that had evolved in precedent.¹⁰⁰ This would provide the Commission with sufficient information to verify that the facility’s “net capacity is below the 80-MW threshold” and would satisfy the need “to indicate to electric utilities their qualified power purchase obligations.”¹⁰¹ The Commission believed that the Form No. 556 would better delineate the information requirements and provide for the step-by-step application of pertinent regulations to an owner or operator’s facility.¹⁰² But the Commission also cautioned that “any form requires some degree of flexibility since the uniqueness of individual facilities and novel applications may require supplemental data submissions.”¹⁰³ The text of the form itself explained that the form was “to be completed for the purpose of demonstrating up-to-date conformance with the qualification criteria of Section 292.203(a)(1) [for small power production QFs] or Section 292.203(b) [for cogeneration facilities], based on actual or planned operating experience.”¹⁰⁴ The form has always provided flexibility in how the filer would demonstrate this conformance. For example, Item 4a of the original Form No. 556 required the filer to “describe the principle components of the facility … and explain their operation.” Item 4b further required the filer to “indicate the maximum gross and maximum net power production capacity of the facility at the point(s) of delivery and *show the derivation.*”¹⁰⁵ The Commission did not specify how a filer must show the derivation.

38. In 2010, the Commission introduced a more specific reporting requirement for “power production capacity” in a revised Form No. 556, but still recognized that Form No. 556 would not be a perfect fit for all possible QFs. The Commission explained that most changes to the content and organization of Form No. 556 were intended to gain the benefits of electronic filing while in most cases collecting the same data as before.¹⁰⁶ The

⁹⁹ *Streamlining of Regulations Pertaining to Parts II and III of the Federal Power Act and the Public Utility Regulatory Policies Act of 1978*, FERC Stats. & Regs. ¶ 32,489, at 32,648 (1992) (cross-referenced at 61 FERC ¶ 61,243) (NOPR for Order No. 575).

¹⁰⁰ *Id.*

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ NOPR for Order No. 575, FERC Stats. & Regs. ¶ 32,489 at 32,649.

¹⁰⁴ Order No. 575, 60 Fed. Reg. 4831, 4855 (Jan. 25, 1995) (Form No. 556).

¹⁰⁵ *Id.* (Form No. 556, Part A, Item 4b).

¹⁰⁶ Order No. 732, 130 FERC ¶ 61,214 at P 22 (changes “will allow FERC to

Commission retained some core requirements. For example, a filer still must “identify utilities purchasing the [QF’s] *useful electric power output*.^{”107} A filer still must “indicate the maximum gross and maximum net electric power production capacity of the facility *at the point(s) of delivery*,”^{”108} although the Commission created an automated worksheet (Lines 7a to 7g) to calculate the relevant figures. This calculation begins with the “maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions” (Line 7a).^{”109} Consistent with the “send out” line of Commission cases, Form No. 556 calculates deductions for parasitic station power at the facility (Line 7b), electrical losses in interconnection transformers (Line 7c), electrical losses in AC/DC conversion equipment (Line 7d), and “other interconnection losses in power lines or facilities … between the terminals of the generator(s) and the point of interconnection with the utility” (Line 7e).^{”110} The result of the automated calculation is the facility’s “maximum net power production capacity” (Line 7g).^{”111} Importantly, Line 7h carries forward the requirement to describe the facility and its operation. The filer must “[i]dentify all … electrical generators, photovoltaic solar equipment … and/or other primary power generation equipment used in the facility” and “[p]rovide a description of how the components operate as a system.”^{”112} All of these changes were designed to provide the information needed to apply the send out calculation to the types of QFs that were generally under development at that time.

39. But the Commission never intended to turn this data collection tool into a mechanical rule that dictated whether a facility constituted a QF. Instead, even with Form No. 556 the Commission contemplated it would make a determination under PURPA based

electronically process QF applications, dramatically reducing required staff resources and human error, and allowing the Commission to identify patterns of reporting errors and noncompliance that would be difficult to detect through manual processing”); *Id.* at 130 FERC ¶ 61,214 at PP 90-91 (noting the problems of inaccurate or missing responses that resulted from the open-ended nature of the pre-existing form).

¹⁰⁷ Form No. 556, Line 4c, <https://www.ferc.gov/media/form-no-556> (OMB Control # 1902-0075, Expiration Nov. 30, 2022) (emphasis added).

¹⁰⁸ *Id.* Section 7 Technical Facility Information (introductory text) (emphasis added).

¹⁰⁹ *Id.* Line 7a.

¹¹⁰ *Id.* Lines 7b-7e.

¹¹¹ *Id.* Line 7g.

¹¹² *Id.* Line 7h.

on all of the facts of the matter and not merely on the contents of the form. Indeed, the form acknowledges that its design may not be suitable for all instances.¹¹³ For example, Line 1m on the form allows an applicant to indicate if it “has special circumstances … that make the demonstration of compliance via this form difficult or impossible.”¹¹⁴ In addition, the form directs the filer to “complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section” at the end of the form.¹¹⁵ Thus, although double-counting is prohibited, an owner or operator may use Form No. 556’s flexibility to account for all effects of its conversion equipment.¹¹⁶

40. We conclude that Broadview has satisfied the Commission’s certification requirement through the Form No. 556 filed with its application. Broadview’s differing approaches to how best to complete Form No. 556 over time do not prevent the Commission from determining that Broadview ultimately has satisfied the requirements that its facility, as proposed in its application on September 11, 2019, uses a primary energy source of solar energy and that its facility will not have a “power production capacity” in excess of 80 MW. Across all of Broadview’s filings with the Commission, in fact, Broadview has consistently reported a net power production capacity of 80 MW to be delivered to the point of interconnection with NorthWestern’s system. Although Broadview did not take advantage of Line 1m and the Miscellaneous section to explain the special circumstances presented by using Form No. 556 to demonstrate compliance with the Commission’s regulations, Broadview did describe in Line 7h how its facility would operate with the inverters to produce at most 82.548 MW of AC power before deducting eligible loads and losses, for a maximum net power production capacity of 80 MW. And beyond Form No. 556, Broadview sufficiently explained in its submittals that its facility

¹¹³ For example, the Commission recently revised its PURPA-implementing regulations to accommodate the evolution of cogeneration facilities using fuel cell systems with integrated hydrocarbon reformation equipment. *Fuel Cell Thermal Energy Output*, Order No. 874, 86 Fed. Reg. 8133 (Feb. 14, 2021), 173 FERC ¶ 61,226 (2021). The Commission did not revise Form No. 556; instead it directed owners or operators of these fuel cell systems to use the existing version of the Form No. 556 and provided guidance on how respondents should complete self-certifications or applications for Commission certification. *Id.* at 8139 n.64.

¹¹⁴ Form No. 556, Line 1M, <https://www.ferc.gov/media/form-no-556> (OMB Control # 1902-0075, Expiration Nov. 30, 2022).

¹¹⁵ *Id.*

¹¹⁶ For example, Broadview reported its gross power production capacity as 82.548 MW of AC power (Line 7a), while acknowledging in line 7h that the total capacity of the solar PV array is 160 MW before accounting for the inverter limitations.

would comply with the size limit on “power production capacity” in PURPA and our regulations.¹¹⁷

3. Commission Certification of Broadview’s Facility as a QF

41. Because Broadview has demonstrated that its facility meets the Commission’s requirements for QF status, we grant certification of small power production QF status for the facility, provided that the facility is operated in the manner described in Broadview’s application on September 11, 2019, Broadview’s answer on October 17, 2019, in the Commission’s September 2020 Order, and in this order. To the extent that facts or representations that form the basis of this order change, this order cannot be relied upon.¹¹⁸ Although Broadview’s facility might still meet the technical requirements for QF status under the changed circumstances, self-recertification or Commission-recertification at that point will be necessary to maintain QF status.¹¹⁹

C. Other Issues

42. In light of our determination above, we dismiss, as moot, Broadview’s arguments that the Commission should have changed its interpretation of “power production capacity” by formal rulemaking rather than apply the interpretation retroactively in an adjudication.¹²⁰ For the same reason, we dismiss, as moot, Broadview’s arguments that the Commission should have discussed in the September 2020 Order how its changed interpretation of “power production capacity” could affect facilities that had previously been exempt from the Commission’s filing requirements based on the facilities’ “net power production capacity” of 1 MW or less.¹²¹

¹¹⁷ Application at 2-8.

¹¹⁸ 18 C.F.R. § 292.207(d)(1)(i).

¹¹⁹ *Id.*

¹²⁰ E.g., Broadview Rehearing Request at 9, 21-22; *see also* SEIA October 1, 2020 Request for Rehearing and Clarification at 6-12; Southern Current LLC October 1, 2020 Request for Rehearing and Clarification at 4-6.

¹²¹ E.g., Broadview Rehearing Request at 9 (citing exemption in 18 C.F.R. § 292.203(d)); *see also* Terraform Power, LLC October 1, 2020 Request for Clarification at 1-2; SEIA October 1, 2020 Request for Rehearing and Clarification at 23-25; New Sun Energy, October 1, 2020 Request for Rehearing at 20-21; Pine Gate Renewables, LLC, October 1, 2020, Request for Rehearing or Clarification at 6-11; Southern Current LLC October 1, 2020 Request for Rehearing and Clarification at 8.

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The Commission orders:

(A) In response to Broadview's request for rehearing, the September 2020 Order is hereby modified and the result set aside, as discussed in the body of this order.

(B) The Commission hereby grants Broadview's application for Commission certification of its facility as a qualifying small power production facility, as discussed in the body of this order.

By the Commission. Commissioner Danly is dissenting with a separate statement attached.
Commissioner Christie is dissenting.

(S E A L)

Kimberly D. Bose,
Secretary.

JA213

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Broadview Solar, LLC

Docket No. QF17-454-006

(Issued March 19, 2021)

DANLY, Commissioner, *dissenting*:

1. Today's order (Order) finds that Broadview Solar, LLC's (Broadview) proposed 160 MW solar power facility has a power production capacity of only 80 MW. This counterintuitive finding is contrary to both the plain language and the structure of the Public Utility Regulatory Policies Act of 1978 (PURPA).¹ It is also inconsistent with the instructions for calculating power production capacity in Form 556, which under our regulations is required for self-certifications and certifications of qualifying facilities (QFs) under PURPA.² Nor does this holding find any support in the Commission's regulations or precedent. I am therefore compelled to dissent in full.

I. The Facility's Power Production Capacity is Well Above 80 MW When Determined by the Method Established by the Commission for Calculating Power Production Capacity

2. Section 201 of PURPA and section 204(a)(1) of the Commission's implementing regulations limit the size of small power production QFs to a "power production capacity" of 80 MW.³ Therefore, the issue raised by Broadview's QF certification application (Application) is whether Broadview's proposed facility (Facility), comprised of 160 MW of solar panels and other equipment, would have a power production capacity greater than 80 MW.

3. Form No. 556 specifies how an applicant should ordinarily calculate and report the power production capacity of its facility. A project sponsor must report maximum gross power production capacity "at the terminals of the individual generators under the most favorable anticipated design conditions" (line 7a). The project sponsor may then subtract parasitic station power used at the facility (line 7b), electrical losses in interconnection transformers (line 7c), electrical losses in AC/DC conversion equipment (line 7d), and

¹ 16 U.S.C. §§ 796(17), 824i, 824a-3.

² 18 C.F.R. § 131.80 (2020). Although our regulations adopt Form 556, the form itself is found at <https://www.ferc.gov/media/form-no-556> (OMB Control # 1902-0075, Expiration Nov. 30, 2022).

³ 16 U.S.C. § 796(17)(A)(ii); 18 C.F.R. § 292.204(a)(1) (2020).

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other interconnection losses (line 7e) to yield the facility's maximum net power production capacity (line 7g).

4. In its Application, Broadview stated that "the Facility will be comprised of a direct current ("dc") coupled array of solar PV panels with *a gross capacity of 160 MW (dc)*."⁴ Broadview also stated that parasitic station power is 1,245 kW,⁵ transformer AC electrical losses are 800 kW,⁶ AC/DC conversion losses are 1,978 kW,⁷ and other interconnection losses are 503 kW.⁸ The total in deductions from the 160 MW gross power production capacity of the Facility is 4.526 MW, which results in a net power production capacity of approximately 155.5 MW. This is 75.5 MW above the statutory maximum allowable power production capacity for a QF. The Facility does not meet the statutory requirement to be a QF.

5. The fact that Form 556 calculations show a 160 MW facility to have a net power production capacity considerably greater than 80 MW is not surprising. However, after stating that the gross power production capacity of its solar facility is 160 MW of direct current (DC) energy, Broadview goes on to assert that "the maximum gross output of the Facility at its inverters will be approximately 82.5 MW(ac)."⁹ The reason for using this much lower number as the gross output of the Facility, according to Broadview, is that "[a]t their terminals, the solar PV panels and BESS connect to twenty 4.127 MW(dc) to alternating current ("ac") inverters."¹⁰ In other words, the Facility employs inverters to convert the DC energy produced by the solar panels into alternating current (AC) that is delivered to the interconnection. The Facility only employs a sufficient number of inverters to convert the 82.5 MW of the 160 MW of DC produced by the Facility into AC. Surplus DC energy produced by the solar panels is diverted to the Facility's battery storage equipment where it is stored for later conversion and delivery to the interconnection.

6. However, Line 7a of Form 556, the line on which the gross power production capacity is reported, requires that filers provide "[t]he maximum gross power production

⁴ Application at 2 (emphasis added).

⁵ *Id.* at 7.

⁶ *Id.* at 8.

⁷ *Id.*

⁸ See Form 556 filed with Application, line 7e.

⁹ Application at 2.

¹⁰ *Id.*

capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions.” (Emphasis added). Broadview affirmatively states in its Application that the inverters are connected to the solar panels “[a]t their terminals.”¹¹ Therefore the gross capacity of the Facility at “the terminals of the individual generator(s)” is 160 MW, and the gross conversion capacity of the inverters reported by Broadview is downstream of those terminals. Form 556, which requires Broadview to report the gross power production capacity of its solar panels at their terminals, does not permit Broadview to report power production capacity measured downstream of the solar panels’ terminals.

7. Broadview also affirmatively states in its Application that, “when there is more dc power available from the solar array than can [be] converted to ac power by the inverters, that power is stored in the [battery storage system].”¹² In other words, even when the Facility is producing 82.5 gross MW of AC, which is the maximum quantity of DC energy that can be converted by the inverters, the Facility is capable of producing additional energy that is diverted to the Facility’s batteries for later delivery to the interconnection. It simply is not possible to conclude that the “gross” power production capacity of the Facility is only 82.5 MW, when the Facility can produce additional energy at the same time that 82.5 MW AC is being delivered to the interconnection and when the additional energy can later be converted to AC and delivered to the interconnection.

8. That should be the end of the story, as the Commission found in its original order issued on September 1, 2020.¹³ However, today, the Commission reverses its holding on rehearing, finding that the 160 MW Facility satisfies PURPA’s 80 MW power production capacity limit. The Commission does not appear to disagree that application of the Form 556 methodology to Broadview’s Application would result in a calculated power production capacity well in excess of 80 MW. However, the Commission dismisses Form 556 as a mere “data collection tool” and notes that Form 556 allows an applicant to “indicate if it ‘has special circumstances . . . that make the demonstration of compliance via this form difficult or impossible.’”¹⁴

9. After disavowing the calculation required by Form 556, the Commission applies a new standard for determining power production capacity, namely “the whole facility’s net output to the electric utility, taking into account all components necessary to produce and

¹¹ *Id.* at 2.

¹² *Id.* at 7.

¹³ *Broadview Solar, LLC*, 172 FERC ¶ 61,194 (2020) (September 2020 Order).

¹⁴ *Broadview Solar, LLC*, 174 FERC ¶ 61,199, at P 39 (2021) (quoting Form No. 556, Line 1M) (Order).

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provide electric energy in a form useful to an interconnected entity.”¹⁵ Not a single word of this long sentence (which for convenience I refer to as the “for-delivery-to-the-utility” standard) appears in the statute.¹⁶ The Commission goes on to find that Broadview’s Facility meets this new standard.¹⁷

10. I do not agree that Form 556 is simply a data collection tool, given its very specific instructions for calculating power production capacity and the importance the result has for a generator’s status as a QF. Rather, Form 556 requires a certain approach to perform the calculation of power production capacity but permits deviations from that approach based on the special circumstances of a particular proposed project. Here, however, Broadview did not claim any special circumstances, and I do not know how it could, given the fact that solar panel technology is well established and specifically referenced in Form 556. Thus, the Facility is unlike the fuel cell systems referenced by the Commission, which in fact are a new technology not contemplated by Form 556.¹⁸

11. Nevertheless, I concede that a Form 556 calculation would not be dispositive if a different result were compelled by PURPA or our regulations or precedent. No such deviation is required here. The Commission’s new for-delivery-to-the-utility standard is inconsistent with PURPA and finds no support in our regulations or our precedent.

II. PURPA Requires Consideration of Power Production Capacity, Not Delivery Capacity

12. PURPA’s 80 MW power production capacity limit appears in the statutory definition of a small power production facility, which is defined as a solar, wind, waste, or geothermal facility that, among other things, “has a power production capacity which, together with any other facilities located at the same site (as determined by the Commission), is not greater than 80 megawatts.”¹⁹ Notably absent from this statutory limit on the size of a small power production facility is any language stating, or even implying,

¹⁵ Order, 174 FERC ¶ 61,199 at P 26.

¹⁶ The Commission asserts that this standard is not new, but merely reflects the application of four decades of precedent to new facts. *Id.* P 27 n.85. As I explain below, this is simply not correct. The new for-delivery-to-the-utility standard represents a material deviation from our precedent.

¹⁷ *Id.*

¹⁸ *Id.* P 39 n.144.

¹⁹ 16 U.S.C. § 796(17)(A)(i)-(ii).

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that the facility producing the power also must be physically capable of delivering the power it produces to the purchasing utility in a useful form.

13. The Commission justifies its new interpretation of the statutory language by asserting that the term “power production capacity” is ambiguous.²⁰ But this claim is merely a stratagem to permit the introduction of a new standard that is inconsistent with the statute’s language. In fact, there is no material ambiguity as to what “power production capacity” could mean. “Power” in this context means energy, and there is nothing in the statutory text to suggest that it means only AC energy and not DC energy. Power “production” unambiguously means the *production* of power, not the delivery of power. And the “capacity” of a generation facility is generally understood to mean its installed capacity²¹ or its maximum power production output.²²

14. The Commission nevertheless claims that the statutory language is ambiguous because “PURPA . . . neither defines the terms “facility” and “power production capacity,” nor explains how the Commission is supposed to ascertain the “power production capacity” of any particular “facility.”²³ Of course, the lack of a further definition of an unambiguous term does not somehow render the term ambiguous. Nor does the fact that the statutory

²⁰ Order, 174 FERC ¶ 61,199 at P 23.

²¹ The Commission asserts that I take the position that the provisions of the statutory standard “compel us to adopt the nameplate capacity of Broadview’s solar array as its power production capacity.” *Id.* P 23, n.76. That is not correct. I am providing the reference to installed capacity because it illustrates that the term “capacity” focuses on generation equipment, not delivery. As my dissent makes clear, I believe that the statutory term is capable of being interpreted as referring to net generation capacity with the power consumed in station power and other essential uses subtracted out.

²² See e.g. PJM Open Access Tariff, section I.1, Definitions (“‘Capacity’ shall mean the installed capacity requirement of the Reliability Assurance Agreement or similar such requirements as may be established.”); *Elec. Storage Participation in Mkts. Operated by Reg’l Transmission Orgs. & Indep. Sys. Operators*, Order No. 841, 162 FERC ¶ 61,127, at P 93 (2018) (capacity of electric storage resources defined as “the maximum output that the resource can sustain for the duration of the minimum run-time.”). That capacity refers to generation output rather than delivery capacity also is supported by the Energy Information Administration’s glossary, which defines “capacity factor” as “the ratio of the electrical energy produced by a generating unit for the period of time considered to the electrical energy that could have been produced at continuous full power operation during the same period”). U.S. Energy Information Administration, *Glossary*, <https://www.eia.gov/tools/glossary/index.php?id=C> (emphasis added).

²³ Order, 174 FERC ¶ 61,199 at P 23.

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term does not specify how the term should be applied to a particular facility create ambiguity when the term unambiguously says that the 80 MW limit should be based on power production capacity.

15. The Commission also suggests ambiguity in the statutory language because “the Commission could, as it has for nearly forty years, look to the maximum output that the facility can produce for the electric utility after accounting for all the constituent parts that make up the facility, which in this case includes the inverters.”²⁴ As I explain below, the Commission’s attempt to fit its new for-delivery-to-the-utility standard into its past precedent strains that precedent beyond recognition. But in any event, the Commission cannot create ambiguity as to the intent of Congress when it enacted in PURPA *in 1978* based on the Commission’s desire to extend its past precedent to establish a new standard *in 2021*.

16. Next, the Commission cites to my statement above that “the term ‘capacity’ is generally equated to ‘output.’”²⁵ From this, the Commission asserts:

As applied to just the facility’s solar panels in this instance, output could be read to refer to the raw quantity of electricity generated. But when applied to the facility as a whole, as PURPA requires, power sent from the solar panels to other internal components, rather than to the grid, cannot properly be considered the output of the facility.²⁶

17. This assertion might carry some force if one were only to consider the word “output” in isolation, and if that word actually was in the statute (the statutory term is “capacity”). But the Supreme Court has counseled against relying on the “hypertechnical reading” of a statutory provisions by reading them in isolation, and has held instead that statutory provisions should be read as a whole.²⁷ Here, PURPA does not contain an 80 MW “capacity” limit, but an 80 MW “*power production* capacity” limit. When the fact that Congress modified the word “capacity” by the words “power production” is considered, it is clear that the statute refers to the capacity of the facility to produce power, not to deliver power to the interconnection. The Commission’s interpretation, derived from its hypertechnical focus on a single word that is not even present in the statute, is, as

²⁴ *Id.*

²⁵ *Id.* P 25.

²⁶ *Id.*

²⁷ *Davis v. Mich. Dep’t of Treasury*, 489 U.S. 803, 809 (1989) (*Davis*).

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the Supreme Court held in *Davis*, “implausible at best.”²⁸ This is not a case in which the Commission is grappling with an ambiguity, it is one where the ambiguity is (unconvincingly) manufactured in order to circumvent the plain language of the statute.

18. Having claimed that “power production capacity” is ambiguous, the Commission goes on to say that its interpretation “is further confirmed when we consider the terms ‘facility’ and ‘power production capacity’ in light of ‘their context and with a view to their place in the overall statutory scheme.’”²⁹ For this proposition the Commission relies on the Supreme Court’s statement in *Davis* that “statutory language cannot be construed in a vacuum. It is a fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme.”³⁰

19. Far be it for me to disagree with the Supreme Court’s declaration of a fundamental canon of statutory construction. But as I explain above, in *Davis*, the Court was addressing a “hypertechnical reading” of a statutory provision that it found was “not inconsistent with the language of that provision examined in isolation.”³¹ When the Court considered the language in the statutory provision as a whole, it determined that the hypertechnical interpretation being advanced by the State of Michigan “would be implausible at best.”³²

20. Thus, the fundamental canon of statutory construction referenced by the Supreme Court prohibits taking isolated phrases of statutes out of context in order to reach hypertechnical interpretations that are implausible when read in conjunction with the remainder of the statute. It does not permit the use of conjecture to avoid the plain meaning of a complete statutory provision. Here, the September 2020 Order did not take the term “power production capacity” of out context. Interpreting that term to mean the capacity to produce power, as opposed to deliver power, is not hypertechnical at all. Instead it affords that term its ordinary meaning. Nor does the Commission cite to any other statutory language in PURPA that renders this plain reading implausible.

²⁸ *Id.* at 810.

²⁹ Order, 174 FERC ¶ 61,199 at P 26 (quoting *Davis*, 489 U.S. at 809).

³⁰ *Id.* n.82.

³¹ *Davis*, 489 US at 809.

³² *Id.* at 810.

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21. Instead, the Commission uses the holding in *Davis* as a jumping off point for an unconvincing speculation as to a possible alternative meaning untethered to any particular statutory provision:

[W]hen a facility meets the QF requirements, the benefits of that status—e.g., the right to interconnect with the relevant electric utility and sell the facility’s output to that utility at an avoided-cost rate —accrue to the facility as a whole. Given that statutory structure, and the importance of the rights at the point of interconnection, we find that the best interpretation of the 80-MW limit on a facility’s power production capacity is as a limit on the whole facility’s net output to the electric utility (i.e., at the point of interconnection), taking into account all components necessary to produce electric energy in a form useful to an interconnected entity.³³

It is not apparent how this explanation puts the statutory language in context or shows its place in the overall statutory scheme. Why does the fact that a QF has the right to interconnect with and sell its output to a utility at avoided cost rates lead to the conclusion that the “best interpretation” of the statute is that the 80 MW power production limit should be read as a limit on the facility’s ability to produce electric energy in a form useful to an interconnected entity? The two points are wholly unrelated.

22. The only possible connection could be if there was a provision in PURPA that limited a small power production facility’s interconnection and sales rights to 80 MW. But that is not the case. PURPA simply requires the Commission to promulgate rules obligating utilities to purchase electricity from QFs (without distinguishing between small power production facilities and cogeneration facilities) at avoided costs without any mention of limiting either interconnection or sales rights.³⁴ Indeed, there are many qualifying cogeneration facilities with capacities of 300 MW, 500 MW, and more.³⁵ Whatever the reason for the 80 MW power production capacity limit, it cannot be that Congress was concerned about the consequences of allowing small power production facilities larger than 80 MW to require utilities to interconnect with them and purchase their electricity at avoided cost rates. There is no logical reason why Congress would try to

³³ Order, 174 FERC ¶ 61,199 at P 26.

³⁴ See PURPA § 210(a)(2); 16 U.S.C. § 824a-3(a)(2).

³⁵ See, e.g. *S. Cal. Edison Co.*, 143 FERC ¶ 61,222, at P 4 (385 MW cogeneration QF); *Chevron U.S.A. Inc.*, 153 FERC ¶ 61,192, at P 2 (two 300 MW cogeneration QFs); *Elk Hills Power, LLC*, Docket No. QF12-252-001 (June 8, 2012) (586 MW cogeneration QF).

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provide utilities with such protections against small power producers delivering more than 80 MW but at the same allowed cogenerators to interconnect and deliver electricity in unlimited quantities.³⁶

23. The Commission also asserts that the statutory term “facility” is ambiguous.³⁷ It relies on this purported ambiguity to support its claim that power production capacity applies to the “whole” facility, including the inverters and their limited capacity to convert DC into AC. I completely agree that nothing in PURPA suggests that inverters cannot be deemed part of a small power production facility. However, the limited ability of Broadview’s Facility to *convert* DC energy into AC for delivery is irrelevant to ascertaining the maximum *power production* capacity of the Facility, which is the only attribute at issue in determining whether the Facility qualifies as a QF.

24. In sum, the majority’s justification for deviating from the plain language of PURPA is not credible. Recall that not a single word of the Commission’s new 29-word for-delivery-to-the-utility standard appears in the statute. We are asked to believe that the Commission’s fidelity to the intent of Congress is best achieved by establishing new tests supported by elaborately concocted arguments and “structural” interpretations of PURPA when instead the Commission could simply read the unambiguous terms of the statute as Congress authored it.

III. The Commission’s New For-Delivery-to-the-Utility Standard is Not Supported by its Regulations or Precedent

25. I have explained why the new for-delivery-to-the-utility standard is inconsistent with the statutory language of PURPA. The Commission’s regulations and precedent offer no better support for its new test than does the statute.

26. First, the Commission does not cite to anything in its regulations to support the conclusion that power production capacity means the ability to deliver energy to the purchasing utility. This is not surprising because the only regulation addressing how to determine power production capacity is Form 556, and a Form 556 calculation leads to the conclusion that the Facility has a power production capacity well in excess of the 80 MW threshold, as we have seen.

27. The Commission does cite to its precedent, but the cited precedent likewise fails to support its new for-delivery-to-the-utility standard. The Commission concedes that

³⁶ A simpler, and more logical, explanation is that Congress wanted to limit the benefits PURPA provided to renewable resources and chose an 80 MW power production capacity as an objective standard for the cut-off.

³⁷ Order, 174 FERC ¶ 61,199 at P 23.

“Broadview’s facility is distinct in certain respects from the facilities that the Commission considered when it first established and initially applied the “send out” test.”³⁸ That is an understatement. In fact, Broadview’s Facility is distinct from every facility in every case in which the Commission has ever addressed the question of how power production capacity should be calculated. In none of the cases cited in the Order did the Commission hold that a facility capable of continuously producing more than 80 MW of power nevertheless satisfies PURPA’s 80 MW power production capacity limit because a facility’s ability to deliver energy to a utility is a limiting factor defining the power production capacity of the facility.

28. The Commission cites to the *Occidental* decision,³⁹ which is the leading send-out case and was the first case in which the Commission was required to define the “power production facility” of a QF. That case’s definition is as follows:

The Commission will consider the “power production capacity” of a facility to be the maximum net output of the facility which can be safely and reliably achieved under the most favorable operating conditions likely to occur over a period of several years. The net output of the facility is *its send out after subtraction of the power used to operate auxiliary equipment in the facility necessary for power generation* (such as pumps, blowers, fuel preparation machinery, and exciters) *and for other essential electricity uses in the facility from the gross generator output.*⁴⁰

29. As this definition makes clear, “send out” means nothing more than that the power production capacity of a facility is not the *gross* power production capacity of the facility, but rather is its *net* power production capacity after “essential electricity uses” in the facility are subtracted. The question of the facility’s ability to deliver the power produced by the facility to the purchasing utility was not even mentioned, much less factored into Commission’s analysis. Nothing in *Occidental* suggests that the Commission would have found that a facility with a 160 MW DC energy gross power production capacity has only an 80 MW net power production capacity merely because only 80 MW of the 160 MW of DC energy produced could be converted to AC for delivery.

30. The Commission cites to part of the discussion in *Occidental* explaining that it would not determine a facility’s power production capacity based on the maximum capability of any particular component of the generating equipment, but instead would look

³⁸ *Id.* P 32.

³⁹ *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231 (1981) (*Occidental*).

⁴⁰ *Id.* at 61,445.

to the overall capability of the facility.⁴¹ This is true, but it also is true that in *Occidental* the Commission focused on the components of the facility’s “generating equipment”⁴² and did not suggest that a limitation on delivery capability was relevant. And the Commission did not establish a definition of power production capacity that bears the slightest resemblance to the new for-delivery-to-the-utility standard but instead, as noted above, used a definition based on maximum output less station use.

31. The Commission also asserts that “[b]ecause the Commission explicitly focused on the overall facility capabilities, *Occidental* supports the proposition that power production capacity means output in a form useful to an interconnected entity.”⁴³ This is a *non sequitur*. The “overall facility capabilities” the Commission focused on in *Occidental* involved a facility consisting of different pieces of standard commercially available power generation equipment that were somewhat mismatched in their power production capabilities. Nothing in *Occidental* even suggests that the Commission considered that the power production capacity of a facility could be limited by deliberately installing only enough inverters to convert half of the power produced by a facility from DC into AC.

32. Next, the Commission cites to the *Malacha* decision.⁴⁴ This was the first case that applied the definition of net power production capacity in *Occidental* to a facility that also owned interconnection facilities. The Commission asserts that this case stands for the proposition “that ‘power production capacity’ is determined from the whole facility’s net output after taking into account all components necessary to produce electric energy in a form useful to an interconnected entity.”⁴⁵ That is a rather broad reading of this decision, in which the Commission found that:

The Occidental decision . . . suggests that: 1) interconnection equipment could be included as “auxiliary equipment in the facility necessary for power generation;” and 2) *the resistive and reactive losses associated with interconnection equipment’s operation could be considered as subsumed in the QF’s “other essential electricity uses.”*⁴⁶

⁴¹ Order, 174 FERC ¶ 61,199 at P 27.

⁴² *Occidental*, 17 FERC ¶ 61,231 at 61,445.

⁴³ Order, 174 FERC ¶ 61,199 at P 25.

⁴⁴ *Malacha Power Project, Inc.*, 41 FERC ¶ 61,350 (1987) (*Malacha*).

⁴⁵ Order, 174 FERC ¶ 61,199 at P 29.

⁴⁶ *Malacha*, 41 FERC ¶ 61,350 at 61,445 (emphasis added).

33. Read in this context, it is clear that *Malacha* simply expands the *Occidental* definition of “other essential electricity uses” that are to be subtracted from the maximum output of the facility. In addition to station power, it also is necessary to subtract out the losses incurred in transmitting electricity from the generation equipment to the point of interconnection with the purchasing utility. *Malacha* did not use the term “electric energy in a form useful to an interconnected entity.” Nor did it address the question of whether a limited ability to deliver could itself be deemed a limitation on the power production capacity of the facility. Nothing in the *Malacha* decision supports the Commission’s position that less than all of a facility’s gross power production capacity should be counted if only a portion of it can be converted to AC.

34. I recognize that, in our September 2020 Order, we held that we would no longer apply the send-out test established in *Occidental* and subsequent cases.⁴⁷ Upon further consideration, I now conclude that this holding went too far. Rather, I believe we should have upheld those cases, but clarified that they mean what they say, i.e. that it is appropriate to reduce the gross maximum production capability of a facility by station power and line losses, consistent with the calculation methodology set forth in Form 556. But I do not believe that the send-out cases hold, and should not be read to hold, that a facility whose generation equipment is capable of generating more than 80 MW can satisfy the statutory 80 MW limit simply because the facility is configured so as to convert no more than 80 MW of the output into AC energy for delivery. Any such reading of those cases would stretch the Commission’s precedent beyond its breaking point.

35. When considering our precedent, it is important to keep in mind that none of it was issued in a vacuum. Instead, the Commission’s rulings were governed by the statutory provision that limits the power production capacity of small power production facilities to 80 MW. It is clear that the Commission was aware of this standard when it issued its prior orders because all of them are couched in terms of what sources of power consumption could be subtracted from the “maximum output” of the generation equipment, as permitted in *Occidental*. None of these cases suggest that the power production capacity of a facility’s power generation equipment could be limited by a facility’s ability to deliver power to the interconnection, which is not surprising because delivery capability is not mentioned in the statute. I disagree with the Commission that Broadview’s Application presents “new facts” that obligate us to expand our precedent,⁴⁸ given that solar panels and inverters have been around for a long time. But even if the facts of Broadview’s Application were new, we cannot extend our past precedent beyond our statutory authority, no matter how logical the Commission might think such extension would be.

⁴⁷ September 2020 Order, 172 FERC ¶ 61,194 at P 23.

⁴⁸ Order at P 27, n.85.

IV. Broadview's Facility is Capable of Delivering More than 80 MW of the Energy Produced by the Facility to the Purchasing Utility

36. Finally, Broadview does not qualify as a QF even under the Commission's new test. It is not correct that the Facility's net output to the electric utility is only 80 MW, even when taking into account all components necessary to produce electric energy in a form useful to an interconnected utility. Broadview does not discharge the surplus electricity into the ground or the air. Instead, "when there is more dc power available from the solar array than can converted to ac power by the inverters, that power is stored in the [battery storage system]."⁴⁹ The battery storage system is capable of storing up to 200 MWh of power.⁵⁰ Later, the electricity stored in the battery storage system is discharged, converted by inverters, and delivered to the purchasing utility.⁵¹ Therefore, the Facility is capable of delivering the entire 160 MWh generated by the solar panels to the purchasing utility. The Commission does not contest this fact, acknowledging that Broadview's configuration allows it to deliver more power over time to NorthWestern than a facility with only 80 MW of solar panels.⁵²

37. The Commission attempts to discount the significance of its concession by noting that the Facility can deliver only 80 MW of the 160 MW generated by the solar panels to the utility at any particular time.⁵³ This fact would be relevant if the Commission were correct that the provisions of PURPA governing interconnection and avoided cost sales provided that such rights were not conferred on small power production facilities with power production capacities in excess of 80 MW. But as I have pointed out, PURPA contains no limit on the size of QF interconnections or the amount of energy that can be sold to utilities. And so we are left with a strained interpretation of the statutory language which allows facilities to produce and deliver to utilities 160 MW of electricity and still satisfy the statutory 80 MW power production capacity limit for small power production facilities. That interpretation finds no support in the statutory language, the Commission's regulations, or applicable precedent.

38. It is unclear, but it appears that the Commission may also justify its statutory interpretation on the grounds that, by finding the Facility is a QF, it is doing nothing more

⁴⁹ Application at 7.

⁵⁰ *Id.* at 2.

⁵¹ *Id.* at 7.

⁵² Order, 174 FERC ¶ 61,199 at P 32.

⁵³ *Id.*

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than enabling an increase in the capacity factor of the Facility.⁵⁴ If so, that justification is misplaced. The Facility's capacity factor is completely unaffected by the Commission's ruling, but rather is determined by the amount of sunlight that reaches the Facility's solar panels and the proportion of time the solar panels are out of service. The purported "increase" in capacity factor is entirely illusory and is achieved only by pretending that the Facility can produce no more than 80 MW, when in fact it is capable of producing and delivering 160 MW. The only real change effectuated by today's Order is that some of the 160 MW of power produced by the Facility is delivered at a different time than if all 160 MW were delivered as it was produced.

For these reasons, I respectfully dissent.

James P. Danly
Commissioner

⁵⁴ *Id.*

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Broadview Solar, LLC

Docket No. QF17-454-006

ERRATA NOTICE

(March 24, 2021)

On March 19, 2021, the Commission issued an “Order Addressing Arguments Raised on Rehearing and Setting Aside Prior Order” in the above-captioned proceeding. *Broadview Solar, LLC*, 174 FERC ¶ 61,199 (2021) (March 19 Order). This Errata Notice hereby corrects Paragraph 23, footnote 68 (as noted below) of the March 19 Order to read as follows:

⁶⁸ Commissioner Danly’s dissent suggests that the statute is unambiguous because each of the words “power,” “production,” and “capacity” have a plain meaning and that those terms compel us to adopt the nameplate capacity of Broadview’s solar array as its power production capacity. Dissent at PP 13, 17. Elsewhere in his dissent, however, he endorses the Commission’s send-out analysis, at least in certain circumstances not present here. Dissent at P 3134. But the send-out analysis, by its very terms, rejects reliance on nameplate, or nominal, capacity. In other words, the send-out test contemplates that a resource’s generating subcomponents can have a nameplate capacity greater than 80 MW. Otherwise, there would be no need to look to the resource’s power production capacity net of parasitic load, line losses, and other essential electricity uses. The tension in those conflicting positions only underscores the extent to which the statute does not unambiguously address the question before us.

Kimberly D. Bose,
Secretary.

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar, LLC

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Docket No. QF17-454-006

**REQUEST FOR REHEARING
OF THE EDISON ELECTRIC INSTITUTE**

Pursuant to Section 313 of the Federal Power Act (“FPA”)¹ and Rule 713 of the Rules of Practice and Procedure² of the Federal Energy Regulatory Commission (“Commission” or “FERC”), the Edison Electric Institute (“EEI”) hereby respectfully submits this Request for Rehearing of the Order Addressing Arguments Raised on Rehearing and Setting Aside Prior Order issued in the above-captioned proceeding on March 19, 2021 (“Order on Rehearing”).³

I. INTRODUCTION

This case stems from the Application for Certification of Qualifying Small Power Production Facility Status (“Application”) filed by Broadview Solar, LLC (“Broadview”) in 2019.⁴ In its Application, Broadview sought small power production Qualifying Facility (“QF”) certification for a facility “comprised of a direct current (‘dc’) coupled array of solar PV panels with a gross capacity of 160 MW(dc) and a four-hour 50 MW(dc) battery energy storage system (200 MWh) . . . that will be charged entirely from the solar array.”⁵ EEI filed a timely motion to intervene and protest of the Application and asserted that the Broadview facility exceeded the

¹ 16 U.S.C. § 825l.

² 18 C.F.R. § 385.713.

³ *Broadview Solar, LLC*, 174 FERC ¶ 61,199 (2021) (“Order on Rehearing”).

⁴ *Broadview Solar, LLC*, Application for Certification of Qualifying Small Power Production Facility Status, Docket No. QF-17-004 (Sept. 11, 2019) (“Application”).

⁵ Application at 2.

express “power production capacity” threshold provided in the Public Utility Regulatory Policies Act of 1978 (“PURPA”).⁶ In 2020, the Commission issued an Order Denying Application for Certification and Revoking Status as a Qualifying Small Power Production Facility (“Initial Order”) in which it reasoned that the “power production capacity” of Broadview’s facility exceeded the 80 MW threshold requirement to be classified as a QF under PURPA.⁷ On March 19, 2021, the Commission issued the Order on Rehearing that overturned the Initial Order. EEI seeks rehearing of the March 19 Order on Rehearing.

EEI supports the use of energy storage and recognizes the benefits that energy storage provides to an electric system. Accordingly, EEI has been supportive of the Commission’s efforts to allow energy storage resources to participate in the wholesale markets on a comparable basis with other resources. The question in the instant proceeding is not whether a battery storage facility or the installation of an additional 80 MW of solar capacity should be used to improve the dispatchability and output of an 80 MW solar resource, but rather whether a combination of resources that exceeds the Congressionally set 80 MW-threshold limit can or should be classified as a small power production QF under PURPA.

As discussed herein, EEI seeks rehearing of the Commission’s decision in the Order on Rehearing to allow resources that are capable of producing more than 80 MW to qualify as a small power production QF. The Commission should not allow resource providers to artificially suppress the generation output from their facilities at a single location simply to qualify for the benefits provided to small power production QFs. In its Initial Order, the Commission appropriately recognized that it needed to sharpen its interpretation of how “power production

⁶ 16 U.S.C. § 796(17)(A)(ii); 18 C.F.R. § 292.204(a)(1); *see generally* Motion to Intervene and Protest of the Edison Electric Institute, Docket No. QF17-454-004 (Oct. 2, 2019) (“EEI Comments”).

⁷ *Broadview Solar, LLC*, 172 FERC ¶ 61,194 (2020) (“Initial Order”). *See* 16 U.S.C. § 796(17)(A).

capacity” is determined under PURPA to better reflect the clear language and purpose of the statute. The Initial Order ensured fidelity to the plain statutory text and intent of PURPA to encourage small power production, while simultaneously limiting the ability of sophisticated developers to game the system (and past Commission interpretations) to meet PURPA’s size requirement for QFs. The Commission should therefore grant rehearing of the March 19 Order on Rehearing, and return to the position it articulated in its Initial Order.

In support hereof, EEI states the following:

II. SPECIFICATIONS OF ERROR

In accordance with Rule 713(c)(1),⁸ EEI provides the following concise statement of errors in the Order on Rehearing:

1. The Commission erred by adopting interpretations of the terms “small power production facility,” “qualifying small power production facility,” and “power production capacity” as used in Sections 796(17)(A) and (B) of PURPA that are contrary to the plain language of the statute or at a minimum an unreasonable interpretation of the statutory text. The Commission’s construction of those terms is arbitrary, capricious, not in accordance with law, in excess of the Commission’s statutory jurisdiction, unsupported by substantial record evidence, and otherwise is not the product of reasoned decisionmaking.
2. The Commission erred in establishing a test for determining “power production capacity” under Section 796(17)(A) of PURPA that frustrates the purpose of the statute. The Commission’s test is therefore arbitrary, capricious, not in accordance with law, in excess of the Commission’s statutory jurisdiction, unsupported by substantial record evidence, and otherwise is not the product of reasoned decisionmaking.
3. The Commission erred in establishing a test for determining “power production capacity” under Section 796(17)(A) of PURPA that illogically departs from or irrationally extends Commission precedent and policies, without acknowledgement or reasoned explanation. The Commission’s test is therefore arbitrary, capricious, not in accordance with law, in excess of the Commission’s statutory jurisdiction, unsupported by substantial record evidence, legally infirm due to the lack of observance of procedures required by law, and otherwise is not the product of reasoned decisionmaking.

⁸ 18 C.F.R. § 385.713(c)(1).

4. The Commission’s decisions to overturn the Initial Order and adopt a new test for determining “power production capacity” are arbitrary, capricious, not in accordance with law, in excess of the Commission’s statutory jurisdiction, unsupported by substantial record evidence, legally infirm due to the lack of observance of procedures required by law, and are not the product of reasoned decisionmaking.
5. Even if the Commission’s new test for determining “power production capacity” under PURPA were consistent with the statute and otherwise lawful, the Commission erred in its application of that test to the facts of this dispute because the facility’s net output is greater than 80 MW even under the Commission’s new test. The Commission’s application of its new test to the facts of this proceeding is arbitrary, capricious, not supported by substantial record evidence, not in accordance with law, in excess of the Commission’s statutory jurisdiction, unwarranted by the facts of this dispute, and otherwise is not the product of reasoned decisionmaking.
6. The Commission acted arbitrarily and capriciously, and abused its discretion, by promulgating a new test for determining “power production capacity” through a case-specific Order rather than amending its regulations, and without following notice-and-comment requirements.

III. STATEMENT OF ISSUES

In accordance with Rule 713(c)(2),⁹ EEI provides the following enumerated statement of issues, including citations to representative Commission and court precedent:

1. The Commission’s interpretations of the terms “small power production facility,” “qualifying small power production facility,” and “power production capacity” are contrary to the plain language of PURPA or at a minimum an unreasonable interpretation of the statutory text, and are therefore unlawful. *See* 5 U.S.C. § 706(2); *see also Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842-44 (1984) (noting that “the agency . . . must give effect to the unambiguously expressed intent of Congress” and that an agency’s interpretation of statutory text must be “reasonable”); *Barnhart v. Sigmon Coal Co., Inc.*, 534 U.S. 438, 450 (2002) (noting that determining “plain . . . meaning” is the first (and often last) step in statutory interpretation); *Amaranth Advisors L.L.C.*, 121 FERC ¶ 61,224 at P 35 & n.85 (2007) (“*Amaranth*”) (similar). In the context of Section 796(A) of PURPA, the word “production” plainly refers to the amount of power generated rather than the amount of power delivered, and the word “capacity” plainly refers to a facility’s generation capacity rather than its output capacity after the addition of inverters. Those meanings are confirmed by ordinary usage,

⁹ 18 C.F.R. § 385.713(c)(2).

dictionary definitions, statutory context, and legislative history. The Commission erred in concluding otherwise.

2. The Commission erred by adopting a test for “power production capacity” that frustrates the purposes of PURPA. *See* 5 U.S.C. § 706(2); *Chapman v. Houston Welfare Rights Org.*, 441 U.S. 600, 608 (1979) (“As in all cases of statutory construction, our task is to interpret the words of the[] statutes in light of the purposes Congress sought to serve.”); *Amaranth*, 121 FERC ¶ 61,224 at P 35. The purposes of PURPA were to (1) encourage the development of renewable resources (2) by providing benefits to small power producers (3) while ensuring just and reasonable prices for consumers. The Commission’s new test frustrates all three of those goals by suppressing competition, privileging *large* and sophisticated power producers, and foisting new costs on consumers. Moreover, the Commission’s new test is not the product of reasoned decisionmaking because the Commission failed to “articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (internal quotation marks omitted).
3. The Commission’s new test for determining “power production capacity” under Section 796(17)(A) of PURPA illogically departs from or irrationally extends the Commission’s prior decisions in *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231 (1981) (“*Occidental*”), and *Malacha Power Project, Inc.*, 41 FERC ¶ 61,350 (1987) (“*Malacha*”). The Order on Rehearing purported to find those cases persuasive, but in truth they involved such materially different facts that have little interpretative utility in this proceeding. To the extent that they do have interpretive value, they support the conclusions reached in the Initial Order because they confirm that the term “power production capacity” should be determined by reference to a facility’s generation capacity after essential uses (but no other amounts) are subtracted from the facility’s rated capacity, as Commissioner Danly explained in his dissent from the Order on Rehearing. That is also the understanding reflected on the Commission’s Form No. 556. An agency’s action is arbitrary and capricious, when, as here, that action “departs from agency precedent without explanation” or “fails to comply with [the agency’s own] regulations.” *Erie Boulevard Hydropower, LP v. FERC*, 878 F.3d 258, 269 (D.C. Cir. 2017). If the Commission determines that *Occidental* or *Malacha* can be read to support the Commission’s new position, then those cases were wrongly decided and the Commission should grant rehearing to bring its precedent back into line with the text of PURPA and correct the arbitrary and capricious interpretations offered in the Order on Rehearing. *See* 5 U.S.C. § 706(2); *see also Chevron*, 467 U.S. at 842-43.
4. The Commission’s decisions to overturn the Initial Order and adopt a new test for determining “power production capacity” are arbitrary and did not observe procedures required under the APA when an agency changes its position. Although an agency is free to alter its interpretation of a statute, the new interpretation must

itself be rational, and the agency must acknowledge that it is changing positions and consider reliance interests. *See FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 514 (2009); *Mich. Pub. Power Agency v. FERC*, 405 F.3d 8, 12 (D.C. Cir. 2005); 5 U.S.C. § 706(2). In this case, the new interpretation offered in the Order on Rehearing is irrational and therefore unlawful. Moreover, the Commission erred by failing to acknowledge that the Order on Rehearing was materially altering its prior approach to analyzing “power production capacity.”

5. Even if the Commission’s new test for determining “power production capacity” under PURPA were lawful, the Commission’s application of that test to the facts of this dispute, including its ultimate determination that the Broadview facility has a “power production capacity” of 80 MW, was arbitrary, capricious, and not supported by substantial record evidence. *See* 5 U.S.C. § 706(2). Because Broadview’s battery storage system can store “excess” power for later delivery to the grid, Broadview’s facility has the capacity to deliver more power than a facility that simply has 80 MW of solar panels, and thus the facility’s net output is higher than 80 MW even under the Commission’s new rule.
6. The Commission acted arbitrarily and capriciously, and abused its discretion, by promulgating a new test for determining “power production capacity” through a case-specific Order rather than amending its regulations, and without following notice-and-comment requirements. *Cf.* 5 U.S.C. §§ 553(b)-(c). Undertaking a rulemaking proceeding would afford the Commission the benefit of input from all interested parties and stakeholders and would avoid concerns about retroactivity and reliance interests. A rulemaking approach would be consistent with the Commission’s prior use of rulemaking procedures to address the standard for qualifying facilities under PURPA. *See Streamlining of Regulations Pertaining to Parts II and III of the Federal Power Act and the Public Utility Regulatory Policies Act of 1978*, FERC Stats. & Regs. ¶ 32,489 at 32,648 (1992); *Qualifying Facility Rates and Requirements*, Order No. 872, 172 FERC ¶ 61,041 (2020); Order 872-A, 173 FERC ¶ 61,158 (2020). Moreover, a rulemaking would be consistent with Congress’s direction that the Commission “prescribe, and from time to time thereafter revise,” rules relating to small power production QFs. 16 U.S.C. § 824a-3(a).

IV. REQUESTS FOR REHEARING

A. The Commission should grant rehearing because it erred in adopting an erroneous interpretation of the term “qualifying small power production facility” that is contrary to the plain language of PURPA.

In order to meet the definition of a “qualifying small power production facility” under Section 17(C) of PURPA,¹⁰ a facility must first be a “small power production facility” as that term is defined in Section 17(A) of the statute.¹¹ Section 17(A) of PURPA in turn defines the term “small power production facility” to mean:

a facility which is an eligible solar, wind, waste, or geothermal facility, or a facility which (i) produces electric energy solely by the use, as a primary energy source, of biomass, waste, renewable resources, geothermal resources, or any combination thereof; and (ii) has a **power production capacity**, which, together with any other facilities located at the same site . . . is not greater than 80 megawatts.¹²

Thus, the key question for determining whether a facility constitutes a “qualifying small power production facility” is whether the “power production capacity” of that facility is 80 MW or less. “As in all statutory construction cases,” the Commission must “begin with the language of the statute” when construing the term “power production capacity.”¹³ And if—as here—the “language at issue has a plain and unambiguous meaning with regard to the particular dispute in the case,” then “[t]he inquiry ceases” where it began and the analysis need proceed no further.¹⁴

As the Commission correctly determined in the Initial Order, the statutory term “power production capacity” plainly refers to the total amount of power that the facility can actually

¹⁰ 16 U.S.C. § 796(17)(C).

¹¹ 16 U.S.C. § 796(17)(A).

¹² *Id.* (emphasis added).

¹³ *Barnhart*, 534 U.S. at 450.

¹⁴ *Id.*; see *Chevron*, 467 U.S. at 842-43 (“First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.”).

generate—i.e., the total power-production capacity of the electricity-generation equipment located at the facility, less parasitic loads and other losses to yield.¹⁵ As EEI explained in its Comments (and as the Commission determined in the Initial Order), “resource developers should not be able to artificially limit the output of their facilities to meet [the] definitional requirement” for “qualifying small power production facility” by using equipment such as “invertors to artificially suppress the maximum output of the plant on to the grid.”¹⁶ In the Order on Rehearing, the Commission reversed course and adopted the position that the term “power production capacity” instead refers to “the whole facility’s net output to the electric utility, taking into account all components necessary to produce and provide electric energy in a form useful to an interconnected entity”¹⁷—i.e., the facility’s “send out” at the point of interconnection with the grid. The Commission should grant rehearing because its new “for-delivery-to-the-utility standard”¹⁸ is contrary to the plain language of PURPA or at a minimum an unreasonable interpretation of the same. That is so for several independent reasons.

First, the Commission’s construction of the term “power production capacity” is at odds with the plain meaning of the word “production.” Both the Commission and reviewing courts determine plain meaning by reference to the “ordinary usage” of a word or phrase, and in turn employ dictionaries to help ascertain how a word is ordinarily used.¹⁹ As a matter of plain

¹⁵ Initial Order at P 23 (noting that a facility’s “send out” and its “power production capacity” are “not the same” and rejecting an approach to determining “power production capacity” that would “improperly focus[] on ‘output’ and ‘send out,’ instead of on ‘power production capacity,’ which is the standard established both in the statute and our regulations”).

¹⁶ EEI Comments at 5; *see* Initial Order at P 25 (“Broadview cannot meet the statutory limit by relying on inverters as a limiting element on a QF’s output.”).

¹⁷ Order on Rehearing at PP 9, 26; *see id.* at P 24 (“[P]ower production capacity is measured based on what the facility can actually produce for sale to the interconnected electric utility.”).

¹⁸ *See id.* at P 24 (Danly, Comm’r, dissenting).

¹⁹ *See Amaranth*, 121 FERC ¶ 61,224 at P 35 (noting that analysis of “undefined” statutory terms must “begin with an examination of ordinary usage” and then employing multiple dictionaries to help determine the meaning of the clause “in connection with”); *see id.* at P 35 n.85 (citing the Supreme Court’s decision in *Engine Manufacturers Association*

language, the term “production” refers to the “*creation*”²⁰ of something or to “[t]hat which is . . . *made21 The term “production” is not synonymous with words or phrases like “delivery” (meaning the “the act of handing over”²²) or “send out” (which means “to dispatch (as an order) from [an] . . . establishment”²³). Thus, the Order on Rehearing erred in concluding that the terms “‘production’ and ‘delivery’ . . . are overlapping” in any material way.²⁴ That syllogism papers over the fact that “production” refers to the amount of a thing that was *created*, while terms like “delivery” or “send out” refer instead to the amount of a thing that is *transferred* after its creation, which can be some amount less than the whole amount that was created. The Order on Rehearing does not engage with the ordinary meaning of the word “production”; instead, it offers extensive supposition about what the word “output”—a term not used in the statute—might mean*

v. *South Coast Air Quality Management District*, 541 U.S. 246, 253 (2004), for the proposition that “statutory construction begins with the plain language of the statute and the assumption that the ordinary meaning of the language reflects the statutory purpose”).

²⁰ Production, *Merriam-Webster New Collegiate Dictionary* 911 (1981); *see id.* (“produce” means “to give being” and is synonymous with “make”); *accord* Production, *Oxford English Dictionary Online*, <https://bit.ly/328t7rp> (accessed Apr. 12, 2021) (production means the “**generation** or **creation** of” something (bolded emphases added)). Contemporary dictionaries are used, where possible, to determine the general meaning of statutory text at the time it was enacted. *See Food Mktg. Inst. v. Argus Leader Media*, 139 S. Ct. 2356, 2363 (2019) (determining meaning of words used in the Freedom of Information Act by reference to “[c]ontemporary dictionaries”); *Amoco Prod. Co. v. S. Ute Indian Tribe*, 526 U.S. 865, 874 (1999) (similar).

²¹ Production, *Black’s Law Dictionary* 1089 (5th ed. 1979) (emphasis added); *accord* Production, *Black’s Law Dictionary* 1461 (11th ed. 2019) (“production” means “the act or process of **making** . . . things” (emphasis added)).

²² Delivery, *Merriam-Webster New Collegiate Dictionary* 298 (1981); *accord* Delivery, *Black’s Law Dictionary* 385-86 (5th ed. 1979) (“delivery” means the “act” by which something “is placed within the actual or constructive possession or control of another”); *see also* Delivery, *Black’s Law Dictionary* 541 (11th ed. 2019) (delivery” means “the formal act of voluntarily transferring something”).

²³ Send Out, *Merriam-Webster New Collegiate Dictionary* 1046 (1981); *accord* Send Out, *Merriam-Webster Dictionary*, <https://bit.ly/2Rv6viR> (accessed Apr. 12, 2021) (“send out” means “mov[ing] outward from a source”).

²⁴ Order on Rehearing at P 25.

as applied to Broadview's facility.²⁵ When, as here, an agency "ignore[s] . . . the plain meaning of the statute," its action is arbitrary and exceeds the scope of authority granted by Congress.²⁶

The Commission's interpretation of the word "production" is especially unnatural and unreasonable in the specific context of this proceeding, in which Broadview will store "excess" power—i.e., direct current power generated by the solar panels that exceeds the inverters' ability to convert to alternating current power—in batteries for later delivery to the grid.²⁷ If the Commission's interpretation of the word "production" were correct, then excess power stored in the batteries, despite already having been generated by the solar array, would not be considered "produced" until it was actually delivered to the grid. That reading of the term "production" is so "unnatural" and "curious" as to strain credulity.²⁸ If a factory were capable of generating 100 widgets a day, but placed 50 of those widgets into inventory instead of introducing them into the supply chain so they could ultimately be purchased by downstream consumers, no layperson would characterize the 50 widgets sitting on the factory's shelf as somehow not having been "produced." So too with the power stored in Broadview's batteries.

Second, the adjoining clauses of the statute confirm that the term "power production capacity" does not refer to a facility's "send out" but rather to the amount of power the facility generates by "us[ing] . . . [an] energy source." Section 796(17)(A)(i) of PURPA defines a "small power production facility" as one which "**produces** electric energy solely *by the use*" of a "primary

²⁵ *Id.*

²⁶ *INS v. Phinpathya*, 464 U.S. 183, 194 (1984); see 5 U.S.C. § 706(2) (noting that agency actions will be held unlawful and set aside if they are "arbitrary, capricious, . . . otherwise not in accordance with law," or "in excess of statutory jurisdiction, authority, or limitations, or short of statutory right").

²⁷ See Order on Rehearing at P 5.

²⁸ *Chandler v. Roudebush*, 425 U.S. 840, 848 (1976).

energy source” such as a renewable resource.²⁹ Moreover, in order to be a “small power production facility” for purposes of Section 796(17)(A), the facility must be an “eligible solar, wind, waste, or geothermal facility,”³⁰ which is itself a term defined in Section 796(17)(E) to mean facilities which “produce[] electric energy solely *by the use*” of certain “energy source[s]” such as solar.³¹ Phrased simply, Congress repeatedly chose to define the term “production” by reference to the phrase “use . . . [an] energy source.” This again supports the notion that the word “production” refers to the total amount of energy that can be generated by “using” or harvesting an “energy source” (here, the 160 MW solar array) irrespective of what constraints may later be placed on output. Indeed, this reading follows from the fundamental principle of statutory interpretation that agencies and courts must account for “the specific context in which . . . language is used.”³²

Third, the Commission’s interpretation of the term “power production capacity” is also at odds with the plain meaning of the word “capacity.” The Order on Rehearing suggests that “the term ‘capacity’ is generally equated to ‘output,’ and that the “output” that matters is not “the raw quantity of electricity generated” but rather the overall output of all of the facility’s components together, excluding “power sent from the solar panels to other internal components, rather than to the grid.”³³ There are several problems with this argument. One is that the statute does not actually use the word “output.” It uses the word “capacity.” And “capacity” refers to a thing’s “ability to produce”—i.e., what it is “capable” of making. In the context of PURPA, “capacity” is different

²⁹ 16 U.S.C. § 796(17)(A)(i) (emphasis added).

³⁰ 16 U.S.C. § 796(17)(A).

³¹ 16 U.S.C. § 796(17)(E) (emphasis added).

³² *Util. Air Regulatory Grp. v. EPA*, 573 U.S. 302, 321 (2014); *see infra* note 40.

³³ Order on Rehearing at P 25.

³⁴ Capacity, *Oxford English Dictionary Online*, <https://bit.ly/2OLkDn6> (accessed Apr. 12, 2021).

from the concept of “output,” which—in the Commission’s view—is best understood to refer to the amount of energy that can be delivered to the grid at the point of interconnection.³⁵ When, as in this proceeding, a facility’s ability to generate and contain power exceeds its ability to send that power out to the grid, then the facility’s “capacity” is greater than its “output.”

Another problem with the Commission’s construction of the term “capacity” is that, as Commissioner Danly noted in his dissent from the Order on Rehearing, Section 17(A)(ii) of PURPA refers not to a facility’s “capacity” but rather to its “**power production** capacity.” When read in this context, the word “‘capacity’ focuses on generation equipment” and “refers to generation output”—using the words “power production”—“rather than delivery capacity.”³⁶ Indeed, the plain meaning of “capacity” as used in this context is confirmed by the U.S. Energy Information Administration’s Glossary of terms.³⁷ The Commission’s contrary interpretation of the word “capacity” violates numerous rules of statutory interpretation, including the principles that the words of a statute must be read in their context,³⁸ that every word in a statute must be given meaning,³⁹ and that words should be interpreted by reference to neighboring language because “a word is known by the company it keeps.”⁴⁰

The Commission also fails to grapple with the fact that, if Congress had truly meant to define “small power production facility” by reference to the facility’s “**output** capacity,” it would

³⁵ Order on Rehearing at P 26.

³⁶ *Id.* at P 13 nn.21-22 (Danly, Comm’r, dissenting).

³⁷ U.S. Energy Info. Admin., *Glossary*, <https://bit.ly/3uM9zFs> (accessed Apr. 12, 2021).

³⁸ See *Gundy v. United States*, 139 S. Ct. 2116, 2126 (2019) (characterizing “statutory interpretation as a ‘holistic endeavor’ which determines meaning by looking not to isolated words, but to text in context”); *Dolan v. U.S. Postal Serv.*, 546 U.S. 481, 486 (2006) (noting that the “definition of words in isolation . . . is not necessarily controlling in statutory construction” and that “[i]nterpretation of a word or phrase depends upon reading the whole statutory text”).

³⁹ *Ransom v. FIA Card Servs., N.A.*, 562 U.S. 61, 70 (2011).

⁴⁰ *Yates v. United States*, 574 U.S. 528, 543 (2015) (discussing “the principle of *noscitur a sociis*”).

have said so.⁴¹ Indeed, statutory context confirms that when Congress intended to qualify the term “capacity” in a way that modified its ordinary meaning, it did so—as when it used the phrases “conversion capacity” or “transmission capacity” in PURPA (the latter referring to the amount of energy actually transmitted or delivered).⁴² The Supreme Court has confirmed that, “when the legislature uses certain language in one part of the statute and different language in another, the court assumes different meanings were intended.”⁴³ For that reason, the Commission was wrong to disregard the textual difference between the phrase Congress actually chose (“power production capacity”) and the distinct meanings of other phrases (e.g., “transmission capacity” or other similar concepts) that refer to delivery or transmission of power.

Fourth, if further confirmation and resort to other interpretative sources were necessary, the legislative history of PURPA confirms that the Commission’s new reading of the term “power production capacity” is erroneous. The Conference Report for PURPA explains that “[t]he power production capacity of the facility means the rated capacity of the facility.”⁴⁴ In its Application, Broadview seeks certification as a small power production QF for a combined solar/storage facility that has a rated capacity (i.e., a planned aggregate nameplate capacity) of at least 210 MW.

⁴¹ See *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 173 n.18 (1978).

⁴² See PURPA, Pub. L. No. 95-617 § 202, 92 Stat. 3117, 3135-36 (1978) (codified as amended at 16 U.S.C. § 824i(a)(1)(D)) (amending the Federal Power Act by adding new § 210(a)(1)(D) to empower the Commission to “issue an order requiring . . . such increase in **transmission capacity** as may be necessary to carry out the purposes” of orders issued pursuant to § 210(a)(1)(A) or (B) (emphasis added)); *see id.* § 203, 92 Stat. at 3136-37 (amending the Federal Power Act by adding new § 211(a) stating that “[a]ny electric utility or Federal power marketing agency may apply to the Commission for an order under this subsection requiring any other electric utility to provide transmission services to the applicant (including any enlargement of **transmission capacity** necessary to provide such services).” (emphasis added)); *see also* § 202, 92 Stat. at 3137-38 (amending the Federal Power Act by adding new §§ 211(b), 211(d)(1)(B), and 211(d)(3)(B)).

⁴³ *Sosa v. Alvarez-Machain*, 542 U.S. 692, 711 n.9 (2004) (internal quotation marks omitted); *see id.* (noting that “when it is clear that Congress knew how to specify” a certain idea or concept by using certain words “when it wanted to,” courts will assume that Congress’s decision not to use those words in a different part of the statute suggests that those parts of the statute have different meaning).

⁴⁴ H.R. Rep. 95-1750 (Conference Report), at 89 (Oct. 10, 1978).

Broadview alleges that despite this rated capacity, inverters will be used to limit the maximum gross output to 82.5 MW and that, after deducting the power necessary to operate the facility and losses, the net power production placed on the system will be 80 MW. But, as EEI previously explained in its comments, “[u]nder a rated capacity test, the Commission would look only at the rated capacity of all the devices that can send power to the grid at the location and ignore the use of artificial devices that prevent the rated capacity from ultimately reaching the electric utility’s system.”⁴⁵ Broadview’s response to this argument—which was in turn credited in the Order on Rehearing—was that the Commission need “not look to the nominal or rated capacity of a facility because the actual output of the facility’s equipment will often be different than its rated capacity” and because the Commission’s precedents (in its view) did not require EEI’s approach.⁴⁶ This theory ignores the contemporaneous Conference Report entirely.⁴⁷

B. The Commission should grant rehearing because it erred in adopting an erroneous test for determining “power production capacity” that frustrates the purpose of PURPA and does not constitute reasoned decisionmaking.

PURPA was part of a package of legislative proposals that sought to reduce dependence on oil and natural gas in light of an energy crisis largely spurred by a lack of domestic supply and an embargo from certain foreign nations. To facilitate development of these small power producers, Congress created a class of third-party generators known as “qualifying facilities” that were not subject to the same requirements, regulations, and oversight as electric utilities. Congress also required electric utilities to purchase electricity from these generators at rates that left

⁴⁵ EEI Comments at 6.

⁴⁶ *Broadview Solar, LLC*, Motion for Leave to Answer and Answer of Broadview Solar LLC at 7, Docket No. QF17-454-004 (Oct. 17, 2019).

⁴⁷ *But see Apex Hosiery Co. v. Leader*, 310 U.S. 469, 489 (1940) (noting that “courts should interpret [a statute’s] words in light of its legislative history”); *New PJM Companies Am. Elec. Power Serv. Corp.*, 107 FERC ¶ 61,271 at P 81 n.95 (2004) (noting that the provision of PURPA at issue was to be interpreted by reference to “the context of the whole statute and its legislative history”).

customers indifferent to the source of the energy. In short, Congress's goals in enacting PURPA were to (1) encourage competition and the development of renewable resources by (2) providing incentives to a specific class of *small* power production facilities, while also (3) ensuring that rates would remain just and reasonable for consumers. Both the Commission and the Supreme Court have confirmed that a statute must be interpreted by reference to Congress's purposes in passing it.⁴⁸ The Order on Rehearing is arbitrary and unlawful because it departs markedly from that rule. Indeed, it frustrates all three of the statutory purposes listed above.

As an initial matter, the Commission's new test for determining "power production capacity" does not encourage competition or promote the use and development of renewable resources. Instead, it restricts competition by eliminating or reducing opportunities for non-PURPA renewables and other carbon-free generation to compete by expanding the universe of facilities that enjoy guaranteed purchasers for their power, often at above-market prices. Moreover, the Commission's new test encourages sophisticated resource developers to "game" their power production metrics to gain competitive advantages that are not available to other clean generators of similar size, which is contrary to PURPA's overall aim of increasing renewable generation and competition.

To make matters worse, the Commission's new test frustrates the carefully crafted incentives that Congress created for small power-production facilities because its practical effect will be to impose a requirement on utilities to purchase energy from increasingly *large* resources, without consideration of the rated capacity of the resource, as long as the resource does not place more than 80 MW onto the grid at one time. Under the Commission's new interpretation, any

⁴⁸ See *Chapman*, 441 U.S. at 608 ("As in all cases of statutory construction, our task is to interpret the words of the[] statutes in light of the purposes Congress sought to serve."); *Amaranth*, 121 FERC ¶ 61,224 at P 35.

facility, regardless of size, can apparently qualify as a small power production facility as long as it can afford the equipment needed to limit output to 80 MW at any given time. As Commissioner Danly has indicated,

[t]he purported “increase” in capacity factor is entirely illusory and is achieved only by pretending that the [Broadview] Facility can produce no more than 80 MW, when in fact it is capable of producing and delivering 160 MW. The only real change effectuated by [the Order on Rehearing] is that some of the 160 MW of power produced by the Facility is delivered at a different time than if all 160 MW were delivered as it was produced.⁴⁹

Phrased differently, the impact of the Commission’s Order on Rehearing is to allow a facility that is substantially larger than 80 MW to deliver its full output to the utility and receive avoided cost rates for that output if it does so 80 MW at a time. That is not what Congress intended.

Finally, the Commission has frustrated Congress’s goal of maintaining reasonable pricing for consumers because the costs of its new test will ultimately be borne by customers during a time when renewable production is increasing and renewable and technology costs are decreasing.

Moreover, recent changes in the dynamics of energy markets confirm that the Commission’s new test is not the product of reasoned decisionmaking and constitutes poor public policy. Since PURPA was enacted and the Commission’s rules implementing PURPA were developed, open access to transmission, greater competition among generators in organized spot and bilateral wholesale markets, improvements in technology, lower costs of technology, and implementation of state and federal policies have helped drive changes in the fuel mix as well as the increased use of new technologies. Today, there are increasing opportunities to participate in regional markets and virtually all States require some form of competitive procurement for resources needed to meet energy demand; as a result, renewable resources comprise an increasing

⁴⁹ Order on Rehearing at P 38 (Danly, Comm’r, dissenting).

share of the fuel mix for energy generation. Over the past eight years, more than half of the industry's investments in new electricity generation have been in non-synchronous wind and solar generation resources,⁵⁰ and nearly 40 percent of America's electricity is generated from carbon-free resources, including nuclear energy, hydropower, solar, and wind.⁵¹ In this context and in light of current energy market conditions, it was arbitrary and capricious for the Commission to adopt an overbroad interpretation of the 80 MW threshold that would allow many more (and larger) facilities to qualify for PURPA's preferential treatment.

The Order on Rehearing spends significant time explaining why a facility that is capable of producing significantly more than 80 MW meets the PURPA definition and should get the benefits provided under PURPA for small power production facilities.⁵² But the Commission did not provide a reasoned justification for, or adequately reconcile, its decision to broaden the number and size of small power production QFs under PURPA, in light of the characteristics of modern energy markets. As technology improves, energy storage costs are forecasted to continue to decrease, and as the penetration of additional non-synchronous resources increases, energy storage resources will increasingly be used as a cost-effective energy grid asset. To the extent the Commission could develop a reasonable basis to conclude such facilities need additional incentives beyond current market dynamics, the Commission has other tools to encourage the development and use of these resources⁵³ and should not, as it is doing here, expand PURPA's statutory scope beyond its clear words. Given these considerations, the Commission's decision

⁵⁰ See U.S. Energy Info. Admin., *Nearly Half of Utility-Scale Capacity Installed in 2017 Came from Renewables* (Jan. 10, 2018), <https://bit.ly/326yg3b>. See also EEI, *Industry Data*, <https://bit.ly/2OZ7Qh2> (accessed Apr. 16, 2021) (collecting statistical highlights on capacity and electricity generation).

⁵¹ See U.S. Energy Info. Admin., *Electricity Explained: Electricity in the United States* (Mar. 2021), <https://bit.ly/2OGYezz>.

⁵² See e.g., Order on Rehearing at PP 24, 26.

⁵³ See generally *Hybrid Resources*, 174 FERC ¶ 61,034 (2021).

was arbitrary and capricious because the agency failed to “articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.”⁵⁴

C. The Commission should grant rehearing because it erred in establishing a test for determining “power production capacity” that irrationally extends or illogically departs from Commission precedent and Commission policies.

As discussed above, the Commission erred in overturning the Initial Order and in taking an expansive view of the statutory term “power production capacity” that departs from the plain language of PURPA and impermissibly expands the scope of projects that qualify as small power production QFs. In support of its decision to overturn the Initial Order and find that the Broadview facility qualifies as a small power production QF, the majority largely relied on *Occidental Geothermal Inc.*⁵⁵ and *Malacha Power Project, Inc.*⁵⁶ But, as explained in detail below, the facts there were materially different from the facts in this proceeding, and thus those Orders provide scant support for the Commission’s determination here that the Broadview facility qualifies as a small-power production QF under PURPA. The best reading of those decisions supports the Commission’s Initial Order, and undercuts the Order on Rehearing. To the extent that *Occidental* or *Malacha* can be read to support the Commission’s new position, then those cases were wrongly decided and the Commission should grant rehearing to bring its precedent back into line with the text of PURPA.

⁵⁴ *State Farm*, 463 U.S. at 43 (internal quotation marks omitted); see *Sithe/Indep. Power Partners, L.P. v. FERC*, 165 F.3d 944, 948 (D.C. Cir. 1999) (FERC must demonstrate that its decision was based on “substantial evidence in the record” and clearly articulate its reasoning); *Pac. Gas and Elec. Co. v. FERC*, 373 F.3d 1315, 1319 (D.C. Cir. 2004) (“FERC ‘must be able to demonstrate that it has made a reasoned decision based upon substantial evidence in the record.’” (citation omitted)).

⁵⁵ *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231 (1981).

⁵⁶ *Malacha Power Project, Inc.*, 41 FERC ¶ 61,350 (1987).

In *Occidental*, while recognizing that “[t]he Conference Report accompanying PURPA indicate[d] that the power production capacity of the facility is its ‘rated capacity,’”⁵⁷ the Commission stated that it

will consider the “power production capacity” of a facility to be the maximum net output of the facility which can be safely and reliably achieved under the most favorable operating conditions likely to occur over a period of several years. The net output of the facility is its send out after subtraction of the power used to operate auxiliary equipment in the facility necessary for power generation (such as pumps, blowers, fuel preparation machinery, and exciters) and for other essential electricity uses in the facility from the gross generator output.⁵⁸

This interpretation of “power production capacity” is reflected in Form No. 556, which the Commission’s regulations require applicants to fill out as part of the self-certification process.⁵⁹ In *Malacha*, the “Commission again concluded that ‘power production capacity’ is determined from the facility’s net output after taking into account all components necessary to produce electric energy in a form useful to an interconnected entity.”⁶⁰

Occidental and *Malacha* involved situations in which a nominal amount of excess energy was sent out from the facility in question, and losses were then deducted from the total to determine the power production capacity.⁶¹ In other words, under *Occidental* and *Malacha*, the amounts deducted from nominal capacity reflected power that would not, and could not, ever be delivered to an interconnected entity because those amounts were lost due to the facility’s “essential electricity uses.”⁶² The instant proceeding presents a dramatically different circumstance. In the Initial Order, the Commission correctly observed that there was a “significant difference” between

⁵⁷ *Occidental*, 17 FERC at p. 61,444.

⁵⁸ *Id.* at p. 61,445.

⁵⁹ See 18 C.F.R. § 131.80; Form No. 556 at 1, 9, <https://www.ferc.gov/media/form-no-556>.

⁶⁰ Order on Rehearing at P 29.

⁶¹ See Form No. 556 at 10, lines 7a-7g.

⁶² *Occidental*, 17 FERC at p. 61,445.

facilities that may incidentally or occasionally exceed 80 MW and a facility “purposefully designed with a 160-MW solar array,” which would generate and ultimately deliver to the grid double the statutory limit of 80 MW.⁶³ Based on this distinction, the Commission’s Initial Order reconsidered its decision in *Occidental*, which was focused on “output” and “send out” instead of on “power production capacity” (which in Broadview’s case are not the same).⁶⁴ As Commissioner Danly noted in his dissent from the Order on Rehearing, “the send-out cases [do not] hold, and should not be read to hold, that a facility whose generation equipment is capable of generating more than 80 MW can satisfy the statutory 80 MW limit simply because the facility is configured so as to convert no more than 80 MW of the output into AC energy for delivery” at any given time.⁶⁵ EEI agrees.

Despite this clear distinction, this is exactly what the majority does in the Rehearing Order. This is illustrated by the fact that after the calculations are done on Form No. 556, as required by *Occidental*, the net power production capacity is 155.5 MW, which is 75.5 MW above PURPA’s express statutory 80 MW limit.⁶⁶ In other words, the calculations mandated by Form No. 556 reflect and confirm the Commission’s prior understanding of the term “power production capacity” in the Initial Order and cannot be reconciled with the interpretation adopted in the Order on Rehearing. The Commission’s decision to adopt a new test that contravenes Form No. 556 was arbitrary and capricious.⁶⁷ So too was it arbitrary and capricious for the Commission to rely on

⁶³ Initial Order at P 21.

⁶⁴ *Id.* at P 23.

⁶⁵ Order on Rehearing at P 34 (Danly, Comm’r, dissenting).

⁶⁶ *Id.* at P 4.

⁶⁷ See *Erie Boulevard*, 878 F.3d at 269 (“[I]f an agency action fails to comply with its regulations, that action may be set aside as arbitrary and capricious.”); see also *Fort Stewart Sch. v. Fed. Labor Relations Auth.*, 495 U.S. 641, 654 (1990) (“It is a familiar rule of administrative law that an agency must abide by its own regulations.”).

Occidental and *Malacha* to support its conclusions in the Order on Rehearing.⁶⁸ Broadview’s proposed scheme should not be considered to satisfy the Commission’s net output precedent articulated in *Occidental*, which involved normal operations of a 80 MW facility. In this case, Broadview proposes to use the project’s configuration of its inverters to artificially suppress the maximum output of the plant onto the grid solely for QF-qualification purposes.

As a more general matter, Broadview’s Application raises the threshold question of whether the “net output” test is applicable or appropriate for determining “power production capacity,” especially in this context of generation coupled with storage. This proceeding presents the Commission with an opportunity to clarify and update its regulations and policies implementing PURPA, which it is required to do from time to time under the statute.⁶⁹ To the extent that the Commission believes *Occidental* and *Malacha* require a finding that Broadview’s “power production capacity” is 80 MW or less, then those decisions should be abrogated. Indeed, as explained above, the interpretation of “power production capacity” offered in the Initial Order best aligns with the statutory text and best accounts for the recent changes in energy markets and generation mix and other evolutions in the industry (including the development of new technologies such as storage and the increased sophistication of resources).

D. The Commission should grant rehearing because its decisions to overturn the Initial Order and adopt a new test for “power production capacity” were arbitrary, insufficiently reasoned, and did not observe required procedures.

Rather than follow the Initial Order (which correctly determined Broadview’s “power production capacity” by reference to the facility’s rated capacity), the Order on Rehearing created a new test in order to accommodate resources that are larger than 80 MW. In his dissent,

⁶⁸ See *Erie Boulevard*, 878 F.3d at 269 (“An agency decision that departs from agency precedent without explanation is . . . arbitrary and capricious.”).

⁶⁹ 16 U.S.C. § 824a-3(a).

Commissioner Danly refers to this new test as the “for-delivery-to-the-utility standard.”⁷⁰ Under this new test, a “facility capable of continuously producing more than 80 MW of power nevertheless satisfies PURPA’s 80 MW power production capacity limit because a facility’s ability to deliver energy to a utility is a limiting factor defining the power production capacity of the facility.”⁷¹ As noted by Commissioner Danly, this is an expansive reading of prior Commission precedent, which was focused on *net* power production capacity after “essential electricity uses” in the facility are subtracted.⁷² As explained above, the question of the facility’s ability to deliver the power produced by the facility to the purchasing utility was not even mentioned in the prior cases on which the Order on Rehearing relies, and the technology at issue here certainly was not contemplated in those decisions.

The Supreme Court explained in *FCC v. Fox Television Stations, Inc.* that an agency may lawfully change its prior opinion without being “subjected to more searching review” than would apply if the agency were adopting its new position in the first instance, but that in order to do so (1) the agency’s new position must itself be rational, (2) the agency must “display awareness that it *is* changing its position,” and (3) the agency must give appropriate consideration to “reliance interests.”⁷³ In this case, the Commission’s adoption of the “for-delivery-to-the-utility standard” does not meet these criteria.

⁷⁰ Order on Rehearing at P 9 (Danly, Comm’r, dissenting).

⁷¹ *Id.* at P 27.

⁷² See *id.* at PP 29-33.

⁷³ 556 U.S. at 514-15; *Mich. Pub. Power Agency*, 405 F.3d at 12 (“The Commission, however, may change its policy only if it provides a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored.” (internal quotation marks omitted)); *PG&E Gas Transmission v. FERC*, 315 F.3d 383, 388-89 (D.C. Cir. 2003) (vacating and remanding Commission orders where the Commission “utterly failed to confront” and distinguish prior precedent, and the Commission’s attempts to distinguish its precedent “were alternately nonexistent, misleading, and irrelevant”).

At the outset, the Commission’s decision to reverse the Initial Order was impermissible because, as explained above, the new position is contrary to the text and purpose of PURPA. That alone renders the Commission’s about-face unlawful. But even assuming that the agency’s new position were rational, the Order on Rehearing would still be unlawful. The Commission’s convoluted discussion of *Occidental* and *Malacha* fails to evince an understanding that the Commission was essentially reversing course on the methodology for calculating qualifying-facility status that the Commission had previously articulated in its Orders and as was reflected in Form No. 556.⁷⁴ As Commissioner Danly explained, the Order on Rehearing “strains [*Occidental* and *Malacha*] beyond recognition” and fails to recognize that the most natural reading of those cases is that “power production capacity” should be determined by reference to a facility’s “*net* power production capacity after ‘essential electricity uses’ in the facility are subtracted.”⁷⁵ The Commission has now adopted a much different interpretation, under which not just “essential electricity uses” but also artificial diversions of electricity to batteries—that involve not losses of power required for essential facility uses, but rather time shifting for later delivery to the grid—are considered when computing “power production capacity.” The Commission’s failure to acknowledge that it was reversing course as to the applicable limits on “power production capacity” was arbitrary and capricious and contrary to law under *FCC v. Fox Television Stations, Inc.*

⁷⁴ See *supra* notes 67-68 and accompanying text.

⁷⁵ Order on Rehearing at PP 15, 29 (Danly, Comm’r, dissenting).

E. The Commission should grant rehearing because, even if its test for determining “power production capacity” were lawful, its application of that test to this case was arbitrary and not supported by substantial record evidence.

The Commission’s new test for determining “power production capacity” is unlawful for the reasons explained above and should therefore be set aside on rehearing. But even if the Commission’s new test were lawful, the Commission’s decision to grant small power production QF status to Broadview under that test was still arbitrary and unsupported. As Commissioner Danly explained in his dissent from the Order on Rehearing, Broadview’s battery storage system can store up to 200 MWh of “excess” power that can later be discharged and delivered to the grid.⁷⁶ Indeed, it is uncontested that Broadview can “deliver more power over time to NorthWestern than a facility with only 80 MW of solar panels.”⁷⁷ It was therefore incorrect for the Commission to find “that the Facility’s net output to the electric utility is only 80 MW, even when taking into account all components necessary to produce electric energy in a form useful to an interconnected utility.”⁷⁸ That finding was unlawful because it was not supported by substantial evidence and was arbitrary and capricious based on the facts of this proceeding.⁷⁹

The Order on Rehearing posits that the power generated by the solar array and then stored in batteries is irrelevant to its “net output” analysis because, while “Broadview’s configuration allows it to more consistently deliver a higher share of the 80 MW power production capacity, that configuration does not change the fact that the Broadview facility is not actually capable of

⁷⁶ *Id.* at P 36.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ See 5 U.S.C. § 706(2) (noting that agency actions will be held unlawful and set aside if they are “arbitrary” or “capricious” or are otherwise “unsupported by substantial evidence”); see also *Fla. Power & Light Co. v. FERC*, 88 F.3d 1239, 1243 (D.C. Cir. 1996) (holding FERC’s interpretation of certain reserve power-sharing agreements was not supported by substantial evidence because the Court was “unable to glean from these orders the basis of FERC’s decision”).

providing more than 80 MW *at any one point in time.*⁸⁰ This analysis ignores the fact that “Broadview does not discharge the surplus electricity into the ground or the air,” but rather eventually delivers that power to the grid.⁸¹ Even if the Order on Rehearing were correct that the limiting power of the inverters was a relevant consideration in determining a facility’s “power production capacity,” the Commission has failed to supply a reasoned explanation of why a facility that is capable of delivering all of the power generated by a 160 MW solar array to the grid should nonetheless be considered to have a net output of only 80 MW. The interpretation offered in the Order on Rehearing might be reasonable if PURPA limited the overall amount of energy that could be sold from a qualifying facility or the size of interconnections to such facilities, or otherwise contained language suggesting that the “power production capacity” of a facility should be judged by reference to the maximum amount of power that a facility can deliver to the grid at any single point in time. But PURPA does not contain such language. For that reason, the Commission’s failure to draw any distinction between facilities that can only deliver the power generated by 80 MW of generation equipment and facilities that can deliver the power created by equipment capable of generating substantially more than 80 MW is arbitrary and unsupported by substantial evidence—or, at the very least, has not been supported by a sufficient and reasoned explanation.

F. The Commission acted arbitrarily and capriciously by adopting a new test for “power production capacity” in a case-specific Order rather than a regulation, and by failing to engage in notice-and-comment rulemaking.

Given the legal and practical significance of this issue, if the Commission wants to develop a test under PURPA to accommodate resources that have a rated capacity significantly over 80 MW, and to explore whether any such test can be reconciled with the statutory text, then the

⁸⁰ Order on Rehearing at P 32 (emphasis added).

⁸¹ *Id.* at P 36 (Danly, Comm’r, dissenting).

Commission should follow the notice-and-comment process required by the Administrative Procedure Act. Undertaking a rulemaking proceeding would afford the Commission the benefit of input from all interested parties, and would allow the Commission to provide advance notice to all affected stakeholders, thus avoiding concerns about retroactivity. A rulemaking process would also better respect the reliance interests not only of small power production QFs, but also the utilities that are compelled by law to interconnect and purchase power from the same, and the customers who bear the cost of the utility's mandatory purchase obligation. A rulemaking approach would be consistent with the Commission's prior use of rulemaking procedures to address the standard for qualifying facilities,⁸² and with Congress's direction that the Commission "prescribe, and from time to time revise," rules relating to small power production QFs.⁸³

⁸² Streamlining of Regulations Pertaining to Parts II and III of the Federal Power Act and the Public Utility Regulatory Policies Act of 1978, FERC Stats. & Regs. ¶ 32,489 at 32,648 (1992); Qualifying Facility Rates and Requirements, Order No. 872, 172 FERC ¶ 61,041 (2020); Order 872-A, 173 FERC ¶ 61,158 (2020).

⁸³ 16 U.S.C. § 824a-3(a)

V. CONCLUSION

WHEREFORE, for the foregoing reasons, EEI respectfully requests that the Commission grant rehearing of its Order on Rehearing and return to the view articulated in the Initial Order.

Respectfully submitted,

/s/ Lopa Parikh

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 16th day of April 2021.

/s/ Lopa Parikh

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**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar, LLC

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Docket No. QF17-454-006

REQUEST FOR REHEARING OF NORTHWESTERN CORPORATION

Pursuant to § 313 of the Federal Power Act¹ and Rule 713 of the Rules of Practice and Procedure² of the Federal Energy Regulatory Commission (“Commission”), NorthWestern Corporation d/b/a NorthWestern Energy (“NorthWestern”) hereby files this Request for Rehearing of the Order Addressing Arguments Raised on Rehearing and Setting Aside Prior Order issued by the Commission in the above-referenced docket on March 19, 2021.³

I. BACKGROUND

On September 11, 2019, in Docket No. QF17-454-004, Broadview Solar, LLC (“Broadview”) filed an application (“Application”) seeking Commission recertification as a small power production qualifying facility (“QF”) pursuant to the Public Utility Regulatory Policies Act of 1978 (“PURPA”)⁴ and section 292.207(b) of the Commission’s regulations.⁵ Broadview states that it is developing a combined solar photovoltaic and battery storage facility in Yellowstone County, Montana that will interconnect to NorthWestern’s transmission system. In December 2016, Broadview self-certified this facility as a small power production QF with a

¹ 16 U.S.C. § 8251 (2012).

² 18 C.F.R. § 385.713 (2019).

³*Broadview Solar, LLC, Order Addressing Arguments Raised on Rehearing and Setting Aside Prior Order, 174 FERC ¶ 61,199 (2021)* (“Order on Rehearing”).

⁴ 16 U.S.C. §§ 796(17), 824a-3 (2018).

⁵ 18 C.F.R. § 292.207(b) (2020).

gross capacity of 104.25 megawatts (“MW”) and a net capacity of 80 MW.⁶ In March 2019, Broadview revised its Form No. 556 to reflect a gross capacity of 160 MW, while maintaining the net capacity of 80 MW.⁷ In the September 11, 2019 Application, Broadview proposed to revise the facility’s gross capacity from 160 MW to 82.5 MW to reflect the facility’s design capabilities, including limiting elements, while maintaining the previously documented net capacity of 80 MW.⁸ In particular, Broadview argued that certain inverters installed would limit the maximum gross capacity of the facility. Broadview asserted that the maximum gross output of the facility at any given time would be 82.5 MW and that, after deducting facility loads and losses, the maximum net capacity of the facility would be 80 MW. Broadview contended that its calculation of the maximum capacity of its facility was consistent with Commission precedent, in particular *Occidental Geothermal, Inc.*⁹

On October 2, 2019, Edison Electric Institute (“EEI”)¹⁰ and NorthWestern¹¹ separately protested the Application. NorthWestern explained, among other things that contrary to Broadview’s interpretation of *Occidental*, a facility’s individual components are relevant to the calculation of net capacity.¹² NorthWestern also explained that the solar array and battery storage system should be considered two distinct small power production facilities at the same site because the 160-MW solar array exceeds the 80-MW net capacity limit and, consistent with

⁶ Form No. 556, Application, Docket No. QF17-454-000, at 9 (filed Dec. 19, 2016).

⁷ Form No. 556, Docket No. QF17-454-003, at 9 (March 13, 2019).

⁸ Form No. 556, Application, Docket No. QF17-454-004, at 9 (filed Sept. 11, 2019) (updating Broadview’s Form No. 556 and requesting Commission certification of the facility that Broadview originally self-certified as an 80 MW solar facility in December 2016).

⁹ 17 FERC ¶ 61,231 (1981) (“*Occidental*”).

¹⁰ Motion to Intervene and Protest of the Edison Electric Institute, Docket No. QF17-454-004 (Oct. 2, 2019) (“EEI Comments”).

¹¹ Motion to Intervene and Protest of NorthWestern Corporation, Docket No. QF17-454-004 (Oct. 2, 2019) (“NorthWestern Comments”).

¹² NorthWestern Comments at 13.

Luz Dev. and Finance Corp.,¹³ the 50-MW battery storage system also qualifies separately as a small power QF.¹⁴ As such, NorthWestern explained that Commission rules and precedent should aggregate the solar array with the battery which results in a total nameplate capacity of 130 MW.¹⁵

On September 1, 2020, the Commission denied the Application and revoked the QF status for Broadview.¹⁶ The Commission concluded that, through PURPA, Congress sought to encourage small power production facilities of not more than 80 MW of capacity and, in fact, specified that such facilities should have a “power production capacity” of not greater than 80 MW. The Commission ruled that its prior analysis in *Occidental* was inconsistent with the 80 MW “power production capacity” limitation in PURPA for small power production QFs.¹⁷ The Commission did not address whether the battery is a separate facility or how the battery should be considered when determining the power production capacity.¹⁸

Broadview sought rehearing of the Initial Order asserting a litany of errors by the Commission.¹⁹ Pursuant to *Allegheny Defense Project v. FERC*,²⁰ Broadview’s rehearing request was denied by operation of law on November 2, 2020.²¹ Notwithstanding that denial, on March 19, 2021, the Commission issued the Order on Rehearing finding that Broadview could be

¹³ 51 FERC ¶ 61,078 (1990).

¹⁴ NorthWestern Comments at 8.

¹⁵ *Id.*

¹⁶ *Broadview Solar, LLC*, Order Denying Application for Certification and Revoking Status as a Qualifying Small Power Production Facility, 172 FERC ¶ 61,194 (2020) (“Initial Order”).

¹⁷ Initial Order at ¶ 23.

¹⁸ Initial Order at ¶ 21, FN 57.

¹⁹ *Broadview Solar, LLC*, Request for Rehearing, Docket No. QF17-454-004 (Sept. 14, 2020).

²⁰ 964 F.3d 1 (D.C.Cir 2020) (en banc).

²¹ *Broadview Solar, LLC*, Notice of Denial of Rehearings by Operation of Law and Providing for Further Consideration, 173 FERC ¶ 62,056 (2020).

certified as a QF.²² The Commission held that “the best interpretation of the 80-MW limit on a facility’s power production capacity is as a limit on the facility’s net output to the electric utility (i.e., at the point of interconnection), taking into account all components necessary to produce electric energy in a form useful to an interconnected entity.”²³ In light of that holding, the Commission concluded that Broadview could be certified as a QF as the inverters at the facility limited the amount of energy placed onto the utility’s system.²⁴

NorthWestern seeks rehearing of the Order on Rehearing which overturned the Initial Order.

II. STATEMENT OF ISSUES

In accordance with Rule 713(c)(2),²⁵ NorthWestern provides the following enumerated statement of issues, including citations to representative Commission and court precedent:

1. The Commission’s decision exceeds the clear language of the statute.²⁶
2. The Commission acted arbitrarily and capriciously by failing to follow prior precedent.²⁷

²² Order on Rehearing at ¶ 20.

²³ *Id.* at ¶ 26.

²⁴ *Id.* at ¶ 32.

²⁵ 18 C.F.R. § 385.713(c)(2).

²⁶ *Sithe/Independence Power Partners v. FERC*, 165 F.3d 944, 948 (FERC must demonstrate that its decision was based on “substantial evidence in the record” and clearly articulate its reasoning); *Pac. Gas & Elec. v. FERC*, 373 F.3d 1315, 1319 (quoting *Northern States Power Co. v. FERC*, 30 F.3d 177, 180) (“FERC ‘must be able to demonstrate that it has made a reasoned decision based upon substantial evidence in the record.’”); *Motor Vehicle Mfrs. Ass’n v. State Farm*, 463 U.S. 29, 43 (an agency must “examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made””)

²⁷ 5 U.S.C. 706(2)(A); *Mich. Pub. Power Agency v. FERC*, 405 F.3d 8, 12 (D.C. Cir. 2005) (“The Commission, however, may change its policy only if it provides ‘a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored.’”); *PG&E Gas Transmission v. FERC*, 315 F.3d 383, 388-89 (D.C. Cir. 2003) (vacating and remanding Commission orders where the Commission “utterly failed to confront” and distinguish prior precedent, and the Commission’s attempts to distinguish its precedent “were alternately nonexistent, misleading, and irrelevant”); *Idaho Power Co. v. FERC*, 312 F.3d 454, 461-462 (D.C. Cir. 2002) (rejecting and vacating Commission interpretation of tariff that is contrary to prior Commission orders and the Commission’s own prior interpretations of tariff provisions).

III. ARGUMENT REGARDING SPECIFICATION OF ERRORS

A. The Commission unlawfully expands upon what is allowed under statute.

In 1978, Congress passed PURPA.²⁸ As the Commission has explained, PURPA was part of a package of legislative proposals intended to reduce the country's dependence on oil and natural gas, which at the time were in short supply and subject to dramatic price increases.²⁹ "PURPA sets forth a framework to encourage the development of alternative generation resources that do not rely on fossil fuels and cogeneration facilities that make more efficient use of the heat produced from the fossil fuels that were then commonly used in the production of electricity."³⁰ A key tenet of PURPA is that a QF may not exceed 80 MW.³¹

Within PURPA, Congress delegated certain authority to the Commission to implement the law, which it did.³² While Congress delegated authority to the Commission to implement PURPA, the Commission may not expand upon or add to what Congress decided.³³ The Commission "must give effect to the unambiguously expressed intent of Congress."³⁴

In this case, Congress clearly expressed an intent that QFs may not exceed 80 MW. The Commission's Order on Rehearing violates Congress's clear intent to limit QFs by certifying a

²⁸ 16 U.S.C. § 824a-3(a).

²⁹ *Qualifying Facility Rates and Requirements; Implementation Issues Under the Public Utility Regulatory Policies Act of 1978*, Notice of Proposed Rulemaking, 168 FERC ¶ 61,184 at ¶ 2 (2019).

³⁰ *Id.*

³¹ *Id.*; see also 16 U.S.C. § 796(17)(A) ("‘small power production facility’ means a facility which is an eligible solar, wind, waste, or geothermal facility, or a facility which (i) produces electric energy solely by the use, as a primary energy source, of biomass, waste, renewable resources, geothermal resources, or any combination thereof; and (ii) has a power production capacity which, together with any other facilities located at the same site (as determined by the Commission), is not greater than 80 megawatts.”).

³² 18 C.F.R. § 292.

³³ *Food and Drug Admin. v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 125, 120 S.Ct. 1291 (2000) (citing *ETSI Pipeline Project v. Missouri*, 484 U.S. 495, 517, 108 S.Ct. 805 (1988)) (holding that “[r]egardless of how serious the problem an administrative agency seeks to address, however, it may not exercise its authority ‘in a manner that is inconsistent with the administrative structure that Congress enacted into law.’”).

³⁴ *Chevron, U.S.A. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-843, 104 S.Ct. 2778 (1984).

facility (160-MW solar array and a 50-MW battery) that is almost three times the statutory threshold. While the Commission acknowledges the 80-MW threshold, it attempts to justify its decision by stating that it “aligns the 80-MW limitation with the mandatory obligations and interconnection rights that are the foundation of Congress’s efforts to ‘encourage’ QF development under PURPA.”³⁵ This rationale fails to justify the Commission’s decision. Within PURPA, Congress encourages QF development, but limits such encouragement to 80 MW. Thus, in this case, the Commission’s decision may encourage QF development, but that encouragement, in turn, violates Congress’s mandate that QFs be no larger than 80 MW. That result is an unlawful expansion of a statute. For this reason, the Commission should rehear this matter and, on rehearing, affirm its Initial Order.

B. The Commission overlooks the battery storage system and its impact on the 80-MW threshold.

When deciding whether to certify Broadview as a QF in the Order on Rehearing, the Commission fails to consider prior precedent that a battery is a separate facility and how, as a separate facility, it affects the 80-MW nameplate capacity threshold. The Commission’s only statement regarding the battery suggests that it does not believe the battery’s inclusion impacts the decision in this matter.³⁶ This oversight and holding are plainly erroneous. If the Commission had considered the battery as required by its precedent as a separate facility, Broadview would exceed the 80-MW threshold.

According to Commission precedent, a battery storage system is a separate facility. In *Luz Dev. and Finance Corp.*, the Commission found that a battery storage facility is an eligible

³⁵ Order on Rehearing at ¶ 26 (citation omitted).

³⁶ Order on Rehearing at ¶ 32 (“we do not believe those differences including the presence of a 200-MWh battery energy storage system … are material for the purposes of determining whether Broadview’s ‘facility’ has a ‘power production capacity’ of no more than 80 MW.”) (emphasis added).

renewable resource for purposes of QF certification, provided that the energy input to the facility is itself biomass, waste, a renewable resource, a geothermal resource, or meets the applicable limits for use of fossil fuel.³⁷ The Commission found that the legislative history of PURPA indicated that Congress intended electric energy storage systems to be small power production facilities.³⁸ Thus, the Commission held in *Luz* that “energy storage facilities such as the proposed Luz battery system are a renewable resource for purposes of QF certification,”³⁹ and that “energy storage facilities are subject to the same fuel use limitations as all other small power production facilities.”⁴⁰

As a separate facility, inclusion of the battery results in Broadview violating the one-mile rule and thereby exceeding the 80-MW threshold. For purposes of assessing compliance with the one-mile rule, the separate capacities of both the solar array and the battery storage system must be aggregated. Section 292.204(a) states that “the power production capacity of a facility for which qualification is sought, *together with the power production capacity* of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site may not exceed 80 megawatts.”⁴¹ The Commission explained this provision in *Northern Laramie Range Alliance*, where it stated “[t]he maximum size of a qualifying small power production facility, as provided for in section 292.204(a)(1) is 80 MW, including the capacity of any other small power production facilities

³⁷ 51 FERC ¶ 61,078 (1990).

³⁸ *Id.* at 61,171 (discussing S. Conf. Rep. No. 1292, 95th Cong. 2d Sess. 89 (1978)).

³⁹ *Id.* at 61,172.

⁴⁰ *Id.* at 61,170.

⁴¹ 18 C.F.R. § 292.204(a)(1) (emphasis added).

that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site.”⁴²

This case involves a proposed QF that will include a battery storage system that is separate from the solar panels. The battery storage system would be connected to Broadview’s solar panels through dc-to-dc voltage inverters that are different from the dc-to-ac inverters that suppress the deliveries from the solar panels to the point of interconnection.⁴³ Both the battery storage system and solar array are owned by the same entity.⁴⁴ Thus, under its plain meaning of section 292.204(a) as well as Commission precedent, this means that the capacity of each small power production facility owned by the same person that uses the same energy resources and is located at the same site or no more than one mile away must be calculated separately prior to combining them to assess the total size.⁴⁵ Assuming the output of the solar panels is limited by the inverters as found by the Commission in the Order on Rehearing, the 80-MW net output of the solar array must be added together with the 50-MW net output of the battery storage system. Therefore, the total capacity of Broadview’s small power production facilities is 130 MW, not 80 MW as claimed by Broadview. As such, Broadview’s facilities exceed the 80-MW size limitation of PURPA and cannot be certified as a QF. Given these facts, the Commission should grant NorthWestern’s request for rehearing and find that a battery is a separate facility that must

⁴² *Northern Laramie Range Alliance, et al.*, 138 FERC ¶ 61,171 at 61,732-33 (2012).

⁴³ See Application, Affidavit of Lloyd Baden Pasley (“Pasley Affidavit”) at ¶ 7.

⁴⁴ Form No. 556, Application, Docket No. QF17-454-004, at 7 and 9 (March 13, 2019).

⁴⁵ See *Id.*; see also *Brady Power Partners*, 61 FERC ¶ 62,113 (1992) (discussing the facility’s “net capacity, in conjunction with the net capacity of any other facilities owned by the same person and located” at the same site); *Dixie Valley, L.P., et al.*, 68 FERC ¶ 62,073 (1994) (same); *Cambria CoGen Co.*, 63 FERC ¶ 62,169 (1993); *Northampton Generating Co., LP.*, 64 FERC ¶ 62,166 (1993); *Rye Patch Limited Partnership*, 64 FERC ¶ 62,017 (1993); *Coso Finance Partners (Navy I Facility)*, 65 FERC ¶ 62,170 (1993); *Coso Power Developers (Navy II Facility)*, 65 FERC ¶ 62,161 (1993); *Coso Energy Developers (BLM Facility)*, 65 FERC ¶ 62,190 (1993); *Union Pacific Energy Co.*, 63 FERC ¶ 62,323 (1993); *Waste Conversion Systems of Georgia, Inc.*, 63 FERC ¶ 62,314 (1993).

be combined with the generation resource in order to determine the total nameplate capacity of the QF.

IV. CONCLUSION

For the foregoing reasons, NorthWestern requests that the Commission grant rehearing of its Order on Rehearing and find that resources that can produce more than 80 MW do not qualify as QFs pursuant to PURPA and that an affiliated battery is a separate facility under PURPA that must be aggregated with the generation facility, which together cannot exceed 80 MW.

Respectfully submitted,

/s/ Sarah Norcott
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April 19, 2021

CERTIFICATE OF SERVICE

Pursuant to Rule 2010 of the Commission's Rules of Practice and Procedure, I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated this 19th day of April 2021.

/s/ Dori Quam _____

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**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Broadview Solar, LLC

Docket No. QF17-454-006

**REQUEST FOR REHEARING
BY THE SOLAR ENERGY INDUSTRIES ASSOCIATION**

Pursuant to Rule 713 of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) Rules of Practice and Procedure,¹ the Solar Energy Industries Association (“SEIA”)² respectfully submits this Request for Rehearing (“Request for Rehearing”) of the Commission’s March 19th, 2021 Order Addressing Arguments Raised on Rehearing and Setting Aside Prior Order³ (the “March 19th Order”), in which the Commission denied SEIA’s Motion to Intervene Out-of-Time⁴ in the above-captioned proceeding. SEIA’s rehearing is limited to requesting reconsideration of the denial of party status, as party status is necessary to participate in continued proceedings in or arising out of this docket (the “Broadview Solar QF Proceeding”) regarding the criteria for evaluating qualifying small power production facilities under the Public Utility Regulatory Policies Act of 1978 (“PURPA”).

¹ 18 C.F.R. § 385.713 (2020).

² The comments contained in this filing represent the position of SEIA as a trade organization on behalf of the solar industry, but do not necessarily reflect the views of any particular member with respect to any issue.

³ See *Broadview Solar, LLC*, 174 FERC ¶ 61,199 (2021) (“March 19th Order”).

⁴ *Broadview Solar, LLC*, Motion to Intervene Out of Time of the Solar Energy Industries Association, Docket No. QF17-454 (Sept. 28, 2020) (“SEIA Motion to Intervene”).

In the March 19th Order, the Commission stated that SEIA failed to demonstrate good cause for late intervention.⁵ As a result, the Commission denied SEIA's motion for leave to intervene under Rule 214.⁶ This denial, however, reflected a prior Commission precedent of a "harsh approach to late interventions," which the has Commission reconsidered.⁷ Consistent with the Commission's revised approach towards late-filed interventions, SEIA respectfully requests that the Commission grant this Request for Rehearing and reverse its denial of SEIA's request to intervene. Granting SEIA's Request for Rehearing is consistent with the Commission's new "more flexible approach"⁸ regarding late interventions, particularly where there has been a lack of notice that broad policy issues would arise in an individual adjudicatory docket.

I. Specification of Errors

Pursuant to Rule 713(c)(1),⁹ SEIA submits the following specification of errors:

The Commission erred in denying SEIA's Motion to Intervene because such decision was based on precedent that has since been reconsidered by the Commission. Continuing to deny SEIA party status in this ongoing proceeding would limit, rather than widen, participation, and would therefore be arbitrary and capricious and inconsistent with the Commission's treatment of requests to intervene under Rule 214.

II. Statement of Issues

In accordance with rule 713(c)(2),¹⁰ SEIA provides the following statement of issues:

⁵ March 19th Order at P 16.

⁶ *Id.*

⁷ See *Northern Natural Gas*, 175 FERC ¶ 61,052 (2021) (Glick, Chairman, concurring at PP 2-3).

⁸ *Id.* (Clements, Comm'r, concurring at P 2).

⁹ 18 C.F.R. § 385.713(c)(1).

¹⁰ 18 C.F.R. § 385.713(c)(2).

The Commission erred in finding that SEIA had not demonstrated “good cause” for its late intervention. Similar to Enbridge Gas Pipelines’ request recently approved by the Commission in *Northern Natural Gas Company*, 175 FERC ¶ 61,052 (2021) (“*Northern Natural Gas*”), SEIA explained that it was concerned about the possibility of industry-wide policy changes occurring in individual qualifying facility dockets at the Commission. See SEIA Motion to Intervene at 2. Failure to grant SEIA party status has the effect of “limiting participation in [a] Commission proceeding through [an] overly strict application of...late intervention rules” and would therefore damage the “Commission’s decision-making process and the public interest.” See *Northern Natural Gas*, 175 FERC ¶ 61,052 (2021) (Clements, Comm’r, concurring at P 1) (“broad participation results in a fuller record and the expression of a wider range of perspectives, both of which lead to better-informed and more durable decisions fulfilling the Commission’s obligations”). Failing to accept SEIA’s Motion to Intervene is arbitrary and capricious when taking into consideration all relevant factors. See 5 U.S.C. § 706(2)(A); *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 42 (1983) (explaining that in determining if an agency decision is arbitrary and capricious, a court must consider whether the decision was “based on a consideration of the relevant factors”).

III. Request for Rehearing

In denying SEIA’s Motion to Intervene under Rule 214, the Commission held that SEIA had not met a required “higher burden” to demonstrate good cause for granting late intervention and wrote that “it is generally Commission policy to deny late intervention at the rehearing state.”¹¹ The Commission cited its precedent decision of *Tennessee Gas Pipeline Company, LLC* in support of this denial.¹²

As explained in SEIA’s Motion to Intervene, as a matter of practice, SEIA generally does not intervene or participate in individualized proceedings for individual solar facilities.¹³ SEIA

¹¹ See March 19th Order at P 14. SEIA notes that its Motion to Intervene was submitted shortly after the Commission’s issuance of the Order, *Broadview Solar, LLC*, 172 FERC ¶ 61,194 (2020) (the “September 1st Order”), and well before the deadline for parties to request rehearing.

¹² March 19th Order at PP 11,15 (citing *Tennessee Gas Pipeline Co., LLC*, 162 FERC ¶ 61,167 at PP 50-51 (2018) (“*Tennessee Gas*”)).

¹³ See SEIA Motion to Intervene at 2.

sought leave to intervene out of time, followed by submission of a Request for Rehearing and Clarification on October 1, 2020,¹⁴ because in the September 1st Order the Commission went far beyond issuing case-specific findings about the Qualifying Facility proposed by Broadview Solar and—without notice—overturned forty years of precedent about how to interpret a statutory provision setting forth criteria for small power production facilities under PURPA.¹⁵ As SEIA explained, because the Commission opened a rulemaking docket to broadly address changes to PURPA implementation *after* the Broadview Solar docket was initiated, and never provided any indication associated with that rulemaking that it was considering revising its rules for interpreting the statutory phrase “power production capacity,” SEIA had no indication that its intervention in Broadview Solar’s individual docket was necessary to protect the broad interests of the solar industry.¹⁶

Reversing this denial and granting SEIA’s intervention as a party to this docket for further proceedings before the Commission and, as necessary, the courts of appropriate jurisdiction, is consistent with the approach set forth by the Commissioners in the recently issued *Northern Natural Gas* Order. As Commissioner Clements recognized in her concurrence, the *Tennessee Gas* approach has caused damage to the Commission’s “decision-making process and

¹⁴ See Request for Rehearing and Clarification by the Solar Energy Industries Association, Docket No. QF17-454-004 (Oct. 1, 2020) (“Initial SEIA Rehearing Request”) (explaining the harmful impact of setting legislative rules in adjudicative dockets without providing requisite notice and the procedural and technical insufficiencies in the test set forth by the September 1, 2020 Order).

¹⁵ *Id.* at 12 (“In the Broadview Order the Commission reversed the *Occidental* precedent and eliminated the ‘send out’ analysis. In its place, the Commission has promulgated a revised methodology that is vague, confusing, and both discriminates against solar QFs and discourages the investment in, and development of, solar QFs”).

¹⁶ See SEIA Motion to Intervene at 2; *see also* Initial SEIA Rehearing Request at 5.

the public interest.”¹⁷ In *Northern Natural Gas*, the Commissioners announced that requests to intervene out of time would be granted given the goal of facilitating “broad participation in Commission proceedings by all who may be affected by the outcome.”¹⁸ Allowing SEIA’s intervention will create “a fuller record and the expression of a wider range of perspectives, both of which lead to better-informed and more durable decisions fulfilling the Commission’s obligations.”¹⁹ Without SEIA’s participation, there would be no parties representing the “wider range of perspectives”²⁰ necessary to preserve the public interest.

IV. CONCLUSION

For the foregoing reasons, SEIA respectfully requests rehearing of the March 19th Order, solely with regard to the Commission’s decision to deny SEIA’s Motion to Intervene.

Respectfully submitted,

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April 19, 2021

¹⁷ See *Northern Natural Gas*, 175 FERC ¶ 61,052 (2021) (Clements, Comm’r, concurring at P 1) (discussing the Tennessee Gas precedent).

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of this pleading has been served this day upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated this 19th day of April, 2021 in Seattle, WA.

/s/ Stephanie Phillips

175 FERC ¶ 62,100
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Broadview Solar, LLC

Docket No. QF17-454-007

NOTICE OF DENIAL OF REHEARINGS BY OPERATION OF LAW AND
PROVIDING FOR FURTHER CONSIDERATION

(May 17, 2021)

Rehearings have been timely requested of the Commission's order issued on March 19, 2021, in this proceeding. *Broadview Solar, LLC*, 174 FERC ¶ 61,199 (2021). In the absence of Commission action on the requests for rehearing within 30 days from the date the requests were filed, the requests for rehearing (and any timely requests for rehearing filed subsequently)¹ may be deemed denied. 16 U.S.C. § 825l(a); 18 C.F.R. § 385.713 (2020); *Allegheny Def. Project v. FERC*, 964 F.3d 1 (D.C. Cir. 2020) (en banc).

As provided in 16 U.S.C. § 825l(a), the rehearing request of the above-cited order filed in this proceeding will be addressed in a future order to be issued consistent with the requirements of such section. As also provided in 16 U.S.C. § 825l(a), the Commission may modify or set aside its above-cited order, in whole or in part, in such manner as it shall deem proper. As provided in 18 C.F.R. § 385.713(d), no answers to the rehearing request will be entertained.

Kimberly D. Bose,
Secretary.

¹ See *San Diego Gas & Elec. Co. v. Sellers of Energy & Ancillary Servs. Into Mkts. Operated by Cal. Indep. Sys. Operator & Cal. Power Exch.*, 95 FERC ¶ 61,173 (2001).

175 FERC ¶ 61,228
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Richard Glick, Chairman;
Neil Chatterjee, James P. Danly,
Allison Clements, and Mark C. Christie.

Broadview Solar, LLC

Docket No. QF17-454-007

ORDER ADDRESSING ARGUMENTS RAISED ON REHEARING

(Issued June 17, 2021)

1. On March 19, 2021, the Commission issued an order on rehearing¹ that set aside the Commission's prior decision² to deny Broadview Solar, LLC's (Broadview) application for Commission certification that Broadview's proposed hybrid solar photovoltaic (PV) facility is a qualifying small power production facility (QF) pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA)³ and section 292.207(b) of the Commission's regulations.⁴ The Edison Electric Institute (EEI), NewSun Energy LLC (NewSun), NorthWestern Corporation (NorthWestern), and the Solar Energy Industries Association (SEIA) filed timely requests for rehearing of the March 2021 Order.⁵

2. Pursuant to *Allegheny Defense Project v. FERC*,⁶ the rehearing requests filed in this proceeding may be deemed denied by operation of law. However, as permitted by

¹ *Broadview Solar, LLC*, 174 FERC ¶ 61,199 (2021) (March 2021 Order)

² *Broadview Solar, LLC*, 172 FERC ¶ 61,194 (2020) (September 2020 Order).

³ 16 U.S.C. §§ 796(17), 824i, 824a-3.

⁴ 18 C.F.R. § 292.207(b) (2020).

⁵ EEI April 16, 2021 Request for Rehearing (EEI Rehearing Request); NewSun April 19, 2021 Request for Rehearing (NewSun Rehearing Request); NorthWestern April 19, 2021 Request for Rehearing (NorthWestern Rehearing Request); SEIA April 19, 2021 Request for Rehearing (SEIA Rehearing Request).

⁶ 964 F.3d 1 (D.C. Cir. 2020) (en banc).

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section 313 of the Federal Power Act,⁷ we are modifying the discussion in the March 2021 Order and continue to reach the same result in this proceeding, as discussed below.⁸

I. Background

3. To be certified as a QF, a small power production facility must comply with the fuel use and size criteria specified in the Commission's regulations and must either file for self-certification of QF status or apply for and obtain Commission certification of QF status.⁹ Regarding size, the "power production capacity" of the facility cannot exceed 80 megawatts (MW).¹⁰

4. Broadview is developing a combined solar PV and battery storage facility in Yellowstone County, Montana, that will interconnect to NorthWestern's transmission system.¹¹ The facility will include a coupled array of solar PV panels with a gross capacity of 160 MW of direct current (DC) electricity and a battery energy storage system with the capacity to discharge 50 MW of DC electricity for up to 4 hours (i.e., a total of 200 MW-hours (MWh)).¹² Broadview's solar PV panels and battery energy storage system will connect to 20 inverters, each capable of converting DC electricity into a maximum output of 4.127 MW alternating current (AC) electricity.¹³ Together, the

⁷ 16 U.S.C. § 825l(a) ("Until the record in a proceeding shall have been filed in a court of appeals, as provided in subsection (b), the Commission may at any time, upon reasonable notice and in such manner as it shall deem proper, modify or set aside, in whole or in part, any finding or order made or issued by it under the provisions of this chapter.").

⁸ *Allegheny Def. Project*, 964 F.3d at 16-17. The Commission is not changing the outcome of the March 2021 Order. *See Smith Lake Improvement & Stakeholders Ass'n v. FERC*, 809 F.3d 55, 56-57 (D.C. Cir. 2015).

⁹ 18 C.F.R. § 292.203(a) (2020) (citing 18 C.F.R. §§ 292.204(a) (2020) (size limit), 292.204(b) (fuel use), 292.207(a) (self-certification), and 292.207(b) (application for Commission certification)).

¹⁰ *Id.* § 292.204(a)(1).

¹¹ Broadview Solar, LLC September 11, 2019 Application at 1 (Broadview 2019 Application).

¹² *Id.* at 2.

¹³ Broadview states that, without the DC-to-AC inverters, the power is not in a form that can be transmitted onto the grid. Broadview claims that these inverters are the

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inverters will have a maximum output of 82.548 MW of AC electricity. After deducting facility loads and losses totaling 2.548 MW, the facility's maximum net output to NorthWestern's system will be 80 MW of AC electricity.¹⁴ When the solar array produces more DC electricity than the inverters can convert to AC electricity, the excess DC electricity will be stored in the battery energy storage system and will not be delivered to the point of interconnection with NorthWestern's system until a later time.¹⁵

5. On September 11, 2019, Broadview applied for Commission certification that Broadview's proposed facility is a small power production QF. Broadview's accompanying Form No. 556 reported the facility's maximum gross power production capacity as 82.548 MW to reflect the facility's design capabilities, including limiting elements. The form reported the facility's maximum net power production capacity as 80 MW.¹⁶ The March 2021 Order provides full details about Broadview's other filings for self-certification, which date back to December 2016.¹⁷ Across all of Broadview's filings, Broadview reported a net power production capacity of 80 MW to be delivered to NorthWestern's system. Consistent with that fact, Broadview has entered into a standard Large Generator Interconnection Agreement with NorthWestern for 80 MW of interconnection service.¹⁸

6. In the September 2020 Order, the Commission explained that Broadview's facility "represents a significant departure from any project that the Commission has previously considered under a QF application."¹⁹ The Commission thus "reconsider[ed] whether it

"gateway" between the DC power provided by the solar array and battery storage system and the AC grid because the amount that the 20 inverters can deliver limits the maximum gross power capacity of the facility (i.e., power that can be delivered to the AC grid). September 2020 Order, 172 FERC ¶ 61,194 at PP 2-3 (citing Broadview 2019 Application, attach. B, Aff. of Lloyd Pasley at PP 2-4).

¹⁴ Broadview 2019 Application at 7-8.

¹⁵ September 2020 Order, 172 FERC ¶ 61,194 at P 6 (citing Broadview 2019 Application at 7).

¹⁶ Broadview 2019 Application at 9.

¹⁷ March 2021 Order, 174 FERC ¶ 61,199 at P 6.

¹⁸ Broadview September 11, 2019 Application at 2 n.3; Broadview October 17, 2019 Answer at 4 (noting that the agreement provides that the total size of the project "will be 80 MW based on the max output of the inverters").

¹⁹ September 2020 Order, 172 FERC ¶ 61,194 at P 22.

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is a facility's 'send out' that is determinative of whether the facility complies with the 80 MW threshold established in PURPA."²⁰ Upon that reconsideration, the Commission departed from its previous, longstanding interpretation that a facility's "power production capacity" is determined by the facility's "maximum net output" or "send out."²¹ The Commission concluded that the "send out" analysis first applied in *Occidental* is inconsistent with the 80-MW "power production capacity" limit for small power production QFs.²² The Commission found that, because the inverters at Broadview's facility impose a conversion or output limit rather than a limit on the solar PV array's power production capacity of 160 MW, Broadview could not meet the 80-MW statutory limit for "power production capacity."²³

7. Broadview sought rehearing. In the March 2021 Order, the Commission set aside the September 2020 Order.²⁴ The Commission determined that the best reading of the PURPA's 80-MW limit on a facility's power production capacity is "a limit on the facility's net output to the electric utility (i.e., at the point of interconnection), taking into account all components necessary to produce electric energy in a form useful to an interconnected entity."²⁵ Applying this interpretation, the Commission concluded that "Broadview's facility will conform to the size limit for a qualifying small power production facility established in PURPA and the Commission's regulations."²⁶

II. Discussion

A. Procedural Matters

8. In the March 2021 Order, the Commission denied late motions to intervene from NewSun; Pine Gate Renewables, LLC; SEIA; Southern Current, LLC; and TerraForm

²⁰ *Id.*

²¹ *Id.* PP 18-23 (citing *Occidental Geothermal, Inc.*, 17 FERC ¶ 61,231 (1981) (*Occidental*); *Malacha Power Project, Inc.*, 41 FERC ¶ 61,350 (1987) (*Malacha*); *Am. Ref-Fuel Co. of Bergen Cty.*, 54 FERC ¶ 61,287 (1991)).

²² *Id.* P 23.

²³ *Id.* P 25.

²⁴ March 2021 Order, 174 FERC ¶ 61,199 at P 23.

²⁵ *Id.* P 26.

²⁶ *Id.* PP 32-33.

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Power, LLC.²⁷ The Commission concluded that the movants had not demonstrated good cause for their delay, as required by Rule 214(d) of the Commission's Rules of Practice and Procedure.²⁸ Because these entities are not parties to this proceeding, the Commission rejected their requests for rehearing.²⁹

9. NewSun and SEIA claim on rehearing that the Commission erred in denying their motions to intervene. SEIA restates its position that it had no indication of a need to intervene because the Commission did not indicate in this individual proceeding or in its later-opened rulemaking on PURPA that the Commission was considering revising its rules for interpreting the statutory phrase "power production capacity."³⁰ SEIA and NewSun also note that the March 2021 Order relied, in part, on the late intervention standard established in *Tennessee Gas Pipeline Company, LLC*.³¹ They claim that the Commission's recent decision in *Northern Natural Gas Company*³² reversed *Tennessee Gas* and introduced a more permissive intervention policy.³³ SEIA and NewSun state that granting late intervention will satisfy the goals expressed in Commissioner Clements' concurrence to *Northern Natural*: to create "a fuller record and the expression of a wider range of perspectives, both of which lead to better-informed and more durable decisions fulfilling the Commission's obligations."³⁴

10. We continue to find that the movants have not satisfied the higher burden to demonstrate good cause for their delay in seeking intervention until after the issuance of a dispositive order.³⁵ Courts have recognized that "the Commission has steadfastly and

²⁷ *Id.* PP 10-18.

²⁸ *Id.* P 15; 18 C.F.R. § 385.214(d) (2020).

²⁹ March 2021 Order, 174 FERC ¶ 61,199. at P 17.

³⁰ SEIA Rehearing Request at 4.

³¹ *Id.* at 4-5; NewSun Rehearing Request at 2 (citing March 2021 Order, 174 FERC ¶ 61,199 at PP 11, 15); see *Tenn. Gas Pipeline Co., LLC*, 162 FERC ¶ 61,013, at P 10 (2018) (*Tennessee Gas*).

³² 175 FERC ¶ 61,052 (2021) (*Northern Natural*).

³³ SEIA Rehearing Request at 4-5; NewSun Rehearing Request at 3-4.

³⁴ *Id.* at 5 (quoting *Northern Natural*, 175 FERC ¶ 61,052 (Clements, Comm'r, concurring at P 1)); NewSun Rehearing Request at 4 (quoting same).

³⁵ March 2021 Order, 174 FERC ¶ 61,199 at P 15 (internal citations omitted).

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consistently held that a person who has actual or constructive notice that his interests might be adversely affected by a proceeding, but who fails to intervene in a timely manner, lacks good cause under Rule 214.”³⁶ This case is not analogous to *Northern Natural*.³⁷ In that case, a natural gas pipeline company intervened out-of-time, but before the Commission’s dispositive order, based on general concerns that the Commission may change industry-wide policy in another natural gas pipeline’s certification proceeding.³⁸ Here, the pleadings of the parties filed between October 2019 and March 2020 addressed the parties’ dispute concerning the Commission’s methodology for determining a facility’s “power production capacity” and specifically discussed *Occidental*.³⁹ These parties recognized that Broadview’s proposal for certification represented a novel project configuration that the Commission had not previously considered for certification. In contrast to *Northern Natural*, movants fail to “explain why they could not have sought to intervene prior to the Commission’s September 2020 Order,”⁴⁰ given the clarity with which these issues were presented in this proceeding from an early stage. Entities interested in becoming a party to Commission proceedings may not wait to see how issues might evolve before deciding whether to intervene to protect their interests.⁴¹ NewSun and SEIA have not persuaded us that a different result is warranted here.

³⁶ See, e.g., *Cal. Trout v. FERC*, 572 F.3d 1003, 1022 (9th Cir. 2009).

³⁷ See *Northern Natural*, 175 FERC ¶ 61,052.

³⁸ Enbridge Gas Pipelines, Motion to Intervene Out-of-Time, Docket No. CP20-487-000, at 3 (filed Mar. 17, 2021).

³⁹ March 2021 Order, 174 FERC ¶ 61,199 at P 15 (citing Broadview 2019 Application at 3-5, 8; NorthWestern October 2, 2019 Motion to Intervene and Protest at 6; EEI October 2, 2019 Motion to Intervene and Protest at 2; Broadview October 17, 2019 Answer at 7-8; NorthWestern November 1, 2019 Motion for Leave to Answer and Answer at 3; Broadview November 5, 2019 Motion for Leave to Answer and Answer at 2).

⁴⁰ *Id.*

⁴¹ See, e.g., *Broadwood Landing, LLC*, 126 FERC ¶ 61,035, at PP 11, 16 (2009) (denying late intervention to movant who claimed that scientific studies made it more aware of its interests in the proceeding); *Cent. Neb. Pub. Power & Irrigation Dist.*, 125 FERC ¶ 61,192, at P 12 (2008) (“The Commission expects parties to intervene in a timely manner based on the reasonably foreseeable issues arising from the applicant’s filings and the Commission’s notice of proceedings.”); *Broadwater Energy, LLC*, 124 FERC ¶ 61,225, at P 13 (2008) (“Those entities with interests they intend to protect

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B. Substantive Matters**1. Interpreting PURPA**

11. Under PURPA, a “qualifying small power production facility” means a facility:

[that] produces electric energy solely by the use, as a primary energy source, of biomass, waste, renewable resources, geothermal resources, or any combination thereof;⁴²

[that] has a power production capacity which, together with any other facilities located at the same site (as determined by the Commission), is not greater than 80 megawatts;⁴³ and

that the Commission determines, by rule, meets such requirements (including requirements respecting fuel use, fuel efficiency, and reliability) as the Commission may, by rule, prescribe.⁴⁴

12. EEI asserts that the Commission erred by adopting interpretations of the terms “small power production facility,” “qualifying small power production facility,” and “power production capacity” that are either contrary to the plain language of PURPA or are unreasonable interpretations of the statutory text.⁴⁵

13. As support for its claim, EEI provides historical and current definitions of “production” and “capacity.”⁴⁶ EEI explains that “production” means the “creation” of something or “that which is made.”⁴⁷ EEI contrasts this definition from those for “delivery” or “send out,” which refer to the amount of a thing that is transferred, in whole

are not entitled to wait until the outcome of a proceeding and then file a motion to intervene once they discover the outcome conflicts with their interests.”).

⁴² 16 U.S.C. § 796(17)(A)(i) (defining “small power production facility”).

⁴³ *Id.* § 796(17)(A)(ii).

⁴⁴ *Id.* § 796(17)(C).

⁴⁵ EEI Rehearing Request at 3, 8.

⁴⁶ *Id.* at 8-11.

⁴⁷ *Id.* at 8-9 (internal citations omitted).

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or in part, after its creation.⁴⁸ In turn, EEI explains that “capacity” refers to a thing’s “ability to produce,” i.e., what it is “capable” of making.⁴⁹ EEI contrasts “capacity” with “output,” asserting that if a facility is able to generate and contain more power than it is able to send to the grid, then the facility’s capacity is greater than its output.⁵⁰

14. EEI also claims that the broader statutory context supports its preferred approach. EEI contends that PURPA’s criterion that a QF “produces electric energy solely by the use” of certain “energy source[s]”⁵¹ supports an interpretation that “production” refers to the total amount of energy that can be generated by using or harvesting an energy source, irrespective of what constraints may later be placed on output.⁵² EEI further claims that Congress intentionally modified the meaning of “capacity” in different contexts, for example using the phrase “transmission capacity” in other provisions of PURPA.⁵³ Because Congress chose to cap a facility’s “power production capacity,” not its “output capacity,” EEI asserts that the term capacity is focused on generation equipment and refers to generation output.⁵⁴ EEI states that PURPA does not contain language suggesting that the “power production capacity” of a facility should be judged by reference to its send out or net output, for example “PURPA does not explicitly limit the overall amount of energy that can be sold from a QF or the size of interconnections to such facilities.”⁵⁵

15. Turning to legislative history, EEI notes that the House Conference Report for PURPA includes a sentence that “[t]he power production capacity of the facility means the rated capacity of the facility.”⁵⁶ Although the phrase “rated capacity” is nowhere defined in PURPA or in the House Conference Report, EEI proposes to define it as

⁴⁸ *Id.* at 9 (internal citations omitted).

⁴⁹ *Id.* at 11-12 (internal citations omitted).

⁵⁰ *Id.*

⁵¹ *Id.* at 10-11 (quoting 16 U.S.C. § 796(17)(A), (E)).

⁵² *Id.* at 10-11.

⁵³ *Id.* at 13.

⁵⁴ *Id.* at 12.

⁵⁵ *Id.* at 25.

⁵⁶ *Id.* at 13 (citing H.R. Rep. 95-1750 at 89 (1978)).

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“planned aggregate nameplate capacity.”⁵⁷ EEI counts a “rated capacity” of at least 120 MW at Broadview’s proposed facility by “look[ing] only at the rated capacity of all the devices that can send power to the grid at the location and ignor[ing] the use of artificial devices that prevent the rated capacity from ultimately reaching the electricity system.”⁵⁸ By what appears to be a similar method, NorthWestern calculates a “power production capacity” of 210 MW at Broadview’s facility by combining the 160-MW solar PV array and the 50-MW battery.⁵⁹ NorthWestern claims that the Commission unlawfully expanded the statute by granting QF status to a facility with a power production capacity almost three times larger than the statute’s 80-MW limit.⁶⁰

16. We are not persuaded by EEI’s efforts to define “power” and “production” and “capacity,” as applied to PURPA.

17. In the March 2021 Order, the Commission explained that “facility” and “power production capacity” are not defined in the statute and do not have commonly understood meanings that, taken together, speak directly to the specific question raised in this proceeding: how should the Commission measure the power production capacity of a novel facility whose generating subcomponents (e.g., solar panels) have a nameplate capacity of greater than 80 MW, but that is physically incapable of producing more than 80 MW for sale to the interconnected electric utility at any one point in time.⁶¹ The Commission explained that, in answering that question, it could either look: (1) only to generating subcomponents or (2) to the maximum output that the facility as a whole can produce for the electric utility after accounting for all the constituent parts that make up the facility, which in this case includes the inverters.⁶² In light of those multiple

⁵⁷ *Id.* at 13. EEI cites no basis for this definition.

⁵⁸ *Id.* at 14 (quoting EEI October 2, 2019 Comments at 6).

⁵⁹ NorthWestern Rehearing Request at 5-6.

⁶⁰ *Id.* at 5-6.

⁶¹ March 2021 Order, 174 FERC ¶ 61,199 at P 23. Even if we were to track EEI’s proposed approach, i.e., that under PURPA “production” should mean the “creation” of something or “that which is made” and that under PURPA “capacity” refers to a thing’s “ability to produce,” our ultimate determination does not change. Because the grid is an AC grid, the appropriate measure of “creation” and of the “ability to produce” should be the creation of and the ability to produce AC electricity. And no one disputes that, when AC electricity is measured, Broadview’s solar cells will produce no more than 80 MW of AC electricity as described in the March 2021 Order and elsewhere in this order.

⁶² *Id.*

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interpretations, the Commission found that the statute is ambiguous as to how the Commission is to measure a facility’s power production capacity, and the Commission concluded that the latter approach is the best reading of the statute.⁶³

18. EEI would have us take the former approach, arguing that PURPA does not suggest that “power production capacity” be judged by reference to a facility’s send out.”⁶⁴ Doing so would mark a sharp break with Commission precedent. Beginning nearly 40 years ago, shortly after PURPA was enacted, the Commission in *Occidental* specifically rejected an approach tied to the words “rated capacity.”⁶⁵ The Commission noted flaws in approaches that determine power production capacity by “the nominal rating of generating equipment in the facility” or by “the nominal rating of even a key component of the facility.”⁶⁶ Instead, the Commission reasonably selected the second approach, described above, which is rooted in “the maximum net output of the facility which can be safely and reliably achieved under the most favorable operating conditions likely to occur over a period of several years.”⁶⁷ *Occidental*, *Malacha*, and later cases applying the “send out” approach relied on the related premises that power production capacity means output in a form useful to an interconnected entity and that the owner or operator of a facility should not be allowed to obtain the benefits of QF status for more than the facility’s net output because only the amount of the net output will be capable of being avoided on an interconnected utility’s system.⁶⁸ To replace this approach with one based on the rated capacity of selected components of the facility as EEI requests would disrupt decades of reliance by the industry on Commission precedent.

19. Moreover, EEI’s position that Congress used “power production capacity” intentionally to focus on the capacity of generation equipment and to refer only to

⁶³ *Id.* (internal citations omitted).

⁶⁴ EEI Rehearing Request at 25.

⁶⁵ *Occidental*, 17 FERC ¶ 61,231 at 61,444; see, e.g., *Davis v. U.S.*, 495 U.S. 472, 484 (1990) (explaining that courts “give an agency’s interpretations and practices considerable weight where they involve contemporaneous construction of a statute and where they have been in long use”).

⁶⁶ *Occidental*, 17 FERC ¶ 61,231 at 61,144-45.

⁶⁷ *Id.* at 61,445

⁶⁸ March 2021 Order, 174 FERC ¶ 61,199 at PP 27-30 (discussing or citing *Occidental*, 17 FERC ¶ 61,231; *Malacha*, 41 FERC ¶ 61,350; *Power Developers, Inc.*, 32 FERC ¶ 61,101 (1985); *Penntech Papers, Inc.*, 48 FERC ¶ 61,120 (1989); *Turners Falls Limited P’ship*, 53 FERC ¶ 61,075 (1990)).

generation output fails to adequately give meaning to Congress's application of the size limit to the "facility" seeking certification. After all, it is the "facility" that is being certified as a QF pursuant to PURPA, and the term "facility" is best read to encompass all of the putative QF's component parts as they work together as a whole, rather than just specific individual components, which, on their own, could not provide power to the interconnecting utility.⁶⁹ Accordingly, focusing only on the solar panels in this instance would ignore the commonly understood meaning of the term facility without any textual indication that Congress intended us to do so.⁷⁰

20. The Commission also considered the terms "power production capacity" and "facility" in light of "their context and with a view to their place in the overall statutory scheme."⁷¹ Although EEI is correct that "PURPA does not explicitly limit the overall amount of energy that can be sold from a QF or the size of interconnections to such facilities,"⁷² the Commission's approach appropriately fulfills the long-established principle of statutory construction to read the provisions of a statute as a harmonious whole. As we explained in the March 2021 Order:

The purpose of PURPA's 80 MW "power production capacity" limitation is to reserve the benefits of QF status for only certain types of facilities. When a facility meets the QF requirements, the benefits of that status—e.g., the right to interconnect with the relevant electric utility and sell the facility's output to that utility at an avoided-cost rate —accrue

⁶⁹ March 2021 Order, 174 FERC ¶ 61,199 at P 24 (internal citations omitted).

⁷⁰ *Id.* P 24.

⁷¹ *Id.* P 26 (citing *Davis v. Mich. Dep't of Treasury*, 489 U.S. 803, 809 (1989) ("[S]tatutory language cannot be construed in a vacuum. It is a fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme.")). See *Graham Cty. Soil & Water Conservation Dist. v. U.S. ex rel. Wilson*, 559 U.S. 280, 290 (2010) (quoting *Gustafson v. Alloyd Co.*, 513 U.S. 561, 568 (1995)) ("Courts have a duty to 'construe statutes, not isolated provisions.'"); *Johnson v. United States*, 559 U.S. 133, 139 (2010) ("Ultimately, context determines meaning."); *Gen. Dynamics Land Sys. v. Cline*, 540 U.S. 581, 596 (2004) (It is a "cardinal rule that statutory language must be read in context [since] a phrase gathers meaning from the words around it." (quotations omitted)); *Robinson v. Shell Oil Co.*, 519 U.S. 337, 341 (1997) (We look to "the language itself, the specific context in which that language is used, and the broader context of the statute as a whole.")).

⁷² EEI Rehearing Request at 25.

to the facility as a whole. ... [The Commission's approach] aligns the 80-MW limitation with the mandatory obligations and interconnection rights that are the foundation of Congress's efforts to "encourage" QF development under PURPA.⁷³

We continue to find that a comprehensive reading of the statute, as we explained in the March 2021 Order, supports the Commission's approach, in which power production capacity is measured based on what the facility can actually produce for sale to the interconnected electric utility.⁷⁴ EEI has not demonstrated that the Commission's interpretation of the statute is incorrect or unreasonable. Thus, we continue to find that "the best interpretation of the 80-MW limit on a facility's power production capacity is as a limit on the facility's net output to the electric utility (i.e., at the point of interconnection), taking into account all components necessary to produce electric energy in a form useful to an interconnected entity."⁷⁵ As the Commission explained, this interpretation is consistent with four decades of precedent using the "send out" analysis to determine the "power production capacity" of a facility and is also consistent with the information-reporting requirements of the Commission's Form No. 556 which is submitted when seeking certification.⁷⁶

2. Novel Facility

21. In the March 2021 Order, the Commission explained that the novel aspects of Broadview's proposed facility do not cause the facility to exceed PURPA's "power production capacity" limit:

To be sure, Broadview's facility is distinct in certain respects from the facilities that the Commission considered when it first applied the "send out" test. Nevertheless, on reconsideration, we do not believe that those differences, including the presence of a 200-MWh battery energy storage system and a 160-MW solar array, are material for the purposes of determining whether Broadview's "facility" has a "power production capacity" of no more than 80 MW. Although Broadview's configuration allows it to more

⁷³ March 2021 Order, 174 FERC ¶ 61,199 at P 26.

⁷⁴ *Id.* P 25.

⁷⁵ *Id.* P 26.

⁷⁶ *Id.* PP 27-33

consistently deliver a higher share of the 80 MW power production capacity, that configuration does not change the fact that the Broadview facility is not actually capable of providing more than 80 MW at any one point in time at its point of interconnection with NorthWestern. On reconsideration, we find that while this effectively increases the Broadview facility’s capacity factor, it does not change the Broadview facility’s “power production capacity” or call into question our longstanding reliance on the “send out” analysis to measure power production capacity.⁷⁷

* * *

Because Broadview’s facility—including the PV panels, inverters, and the battery system—can deliver a maximum of 80 MW of power to NorthWestern’s system at any one point in time, the power production capacity of Broadview’s facility cannot and will not exceed 80 MW.⁷⁸

22. On rehearing, EEI raises several related arguments that the solar PV array, battery system, and DC-to-AC inverters at Broadview’s facility cause the facility to exceed PURPA’s “power production capacity” limit.⁷⁹ EEI argues that the Commission’s decision in the March 2021 Order to grant QF status for Broadview’s novel facility frustrates Congress’s purposes in PURPA.⁸⁰

23. EEI argues that *Occidental*, *Malacha*, and similar precedent address “normal operations”⁸¹ of “facilities that can only deliver the power generated by 80 MW of generation equipment,”⁸² where “the amounts of power deducted from the nominal capacity reflected power that would not, and could not, ever be delivered to an

⁷⁷ *Id.* P 32.

⁷⁸ *Id.* P 33.

⁷⁹ EEI Rehearing Request at 18-25.

⁸⁰ *Id.* at 15-18.

⁸¹ *Id.* at 21.

⁸² *Id.* at 25.

interconnected entity because those amounts were lost due to the facility’s ‘essential electricity uses.’”⁸³

24. By contrast, EEI characterizes Broadview’s facility as a facility that “can deliver the power created by equipment capable of generating substantially more than 80 MW.”⁸⁴ Put another way, EEI states that Broadview’s facility is purposefully designed with a 160-MW solar PV array “to generate and ultimately deliver to the grid double the statutory limit of 80 MW.”⁸⁵ EEI argues that the facility does so by making “artificial diversions of electricity to batteries—that involve not losses of power required for essential electricity uses, but rather time-shifting for later delivery to the grid.”⁸⁶ EEI asserts that Broadview uses “the configuration of the [facility’s] inverters to artificially suppress the maximum output of the plant onto the grid solely for QF-qualification purposes.”⁸⁷

25. EEI argues that the Commission’s approach to determining the “power production capacity” of Broadview’s proposed facility frustrates Congress’s purposes as reflected in PURPA. EEI claims that the practical effect of the Commission’s “new” interpretation is that “any facility, regardless of size, can apparently qualify as a small power production facility as long as it can afford the equipment needed to limit output to 80 MW at any given time.”⁸⁸ EEI believes that the Commission’s “new” interpretation “encourages

⁸³ *Id.* at 19.

⁸⁴ *Id.* at 25.

⁸⁵ *Id.* at 20. Broadview cannot “ultimately deliver to the [AC] grid double the statutory limit of 80 MW.” It can only deliver 80 MW of AC electricity to the grid, as we have described in the March 2021 Order and elsewhere in this order.

⁸⁶ *Id.* at 23. Based on the use of the battery, EEI criticizes the Commission’s conclusion that power sent to the battery storage system is only “produced” when it is later delivered to the grid, which EEI says is an unnatural and unreasonable interpretation of “production.” *Id.* at 10. For the same reason, EEI criticizes the Commission’s conclusion that the facility’s net output to the electric utility is only 80 MW. *Id.* at 24.

⁸⁷ *Id.* at 21. We disagree with EEI; inverters do not “artificially” suppress output. Rather, inverters convert DC electricity, which the grid cannot accept, into AC electricity, which the grid can accept.

⁸⁸ *Id.* at 15-16. EEI similarly describes the practical effect is “to impose a requirement on utilities to purchase energy from increasingly large resources, without consideration of the rated capacity of the resource, as long as the resource does not place more than 80 MW onto the grid at one time.” *Id.*

sophisticated resource developers to ‘game’ their power production metrics to gain competitive advantages that are not available to other clean generators of similar size.”⁸⁹ EEI states that the Commission has, in effect, “expand[ed] the universe of facilities that enjoy guaranteed purchasers for their power, often at above-market prices.”⁹⁰ EEI asserts that, contrary to Congress’s purposes, the Commission’s expanded universe of facilities eliminates or reduces competition from non-PURPA renewables and other carbon-free generation.⁹¹ EEI states that the increased costs of the Commission’s “new” interpretation will ultimately be borne by customers during a time when current energy market dynamics are producing the opposite result—i.e., incentives and opportunities for carbon-free energy and energy storage are increasing, technology is improving, deployment of carbon-free energy and energy storage is increasing, and costs of technology are decreasing.⁹²

26. To the extent that EEI’s positions are based on an interpretation of “power production capacity” that is limited to the generating subcomponents of a facility, the Commission has explained why an interpretation focusing on the facility’s net output is the more reasonable interpretation of the statute.⁹³

27. The Commission has acknowledged that some aspects of Broadview’s proposed facility are distinct in certain respects from the facilities that the Commission considered when it first applied the “send out” test.⁹⁴ Other aspects are not. That the owner or operator of a facility would seek to send out as close to 80 MW as possible to an interconnected utility at all times *and* would configure a facility not to exceed that limit is not novel; it is no more than the owner or operator of QF trying to maximize the value of its facility within the given constraints. From the earliest cases under PURPA, the Commission has equated “power production capacity” under PURPA with the amount of power that a facility is capable of safely and reliably sending to the interconnecting utility.⁹⁵ EEI is correct that the calculations in past cases of facilities’ “send out” or “net

⁸⁹ *Id.* at 15.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.* at 16-17.

⁹³ See *supra* PP 18-20; March 2021 Order, 174 FERC ¶ 61,199 at PP 21-26.

⁹⁴ March 2021 Order, 174 FERC ¶ 61,199 at P 32.

⁹⁵ *Id.* at PP 27-30 (discussing *Occidental*, 17 FERC ¶ 61,231; *Malacha* 41 FERC ¶ 61,350; *Streamlining of Regulations Pertaining to Parts II and III of the Federal Power*

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“output” did not involve the particular facts before the Commission in this proceeding—a 160-MW solar PV array, a 200-MWh battery system, and a bank of DC-to-AC inverters. But the Commission has explained its March 2021 decision to apply the longstanding “send out” test, with its focus on overall facility capabilities measured at the point of interconnection, to determine the “power production capacity” of Broadview’s facility.⁹⁶ This application of existing policy to new facts does not mean the Commission is now coming up with a new interpretation of the statute. The Commission’s decision in the March 2021 Order thus does not constitute an unlawful reversal of policy, as EEI claims;⁹⁷ it was an application of the Commission’s longstanding policy. Indeed, it was the September 2020 Order that adopted a change from longstanding policy.⁹⁸

28. Broadview’s proposed use of a 160-MW solar PV array, a 200-MWh battery system, and a bank of DC-to-AC inverters is not contrary to PURPA’s “power production capacity” limit. EEI states that it is uncontested that Broadview’s facility can deliver more power over time to NorthWestern than another facility with only 80 MW of solar panels.⁹⁹ This is the very purpose of Broadview’s hybrid design. It seeks to deliver up to 80 MW of AC electricity (and no more) in any hour, and thus comply with PURPA’s 80 MW statutory limit on power production capacity, but at a higher average capacity factor than a facility with fewer solar panels and no battery system. Accordingly, from

Act and the Public Utility Regulatory Policies Act of 1978, Order No. 575, FERC Stats. & Regs. ¶ 31,014 (1995) (cross-referenced at 70 FERC ¶ 61,022)).

⁹⁶ *Id.* at PP 27-30.

⁹⁷ EEI Rehearing Request at 21-23. In a related argument, EEI states that the Commission should use notice-and-comment rulemaking if the Commission wishes to develop a test under PURPA “to accommodate resources that have a rated capacity significantly over 80 MW and to explore whether any such test can be reconciled with the statutory text.” *Id.* at 25-26. The courts have made clear, however, that the choice between proceeding by general rule or by individual, ad hoc adjudication is one that lies primarily in the informed discretion of the administrative agency. *See, e.g., SEC v. Chenery Corp.*, 332 U.S. 194, 202-04 (1947). Here, the issue of how to determine the power production capacity of Broadview’s facility was squarely before the Commission, and fully addressed in the parties’ pleadings, and it was reasonable for the Commission to act as it did. In any event, the Commission in the March 2021 Order did not reverse an existing policy but instead applied a longstanding policy.

⁹⁸ March 2021 Order, 174 FERC ¶ 61,199 at PP 22-23.

⁹⁹ EEI Rehearing Request at 24. EEI’s argument conflates power production capacity, which measures the instantaneous net output of a facility, with total generation over time.

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NorthWestern's perspective, Broadview's facility will never produce (and, thus, NorthWestern will never avoid) more than 80 MW at any given time.

29. The design of Broadview's facility is not "gaming" the power production capacity limit, as EEI asserts.¹⁰⁰ Rather, as the Commission explained in the March 2021 Order, the facility's design to use the 160-MW solar PV array, 200-MWh battery, and bank of DC-to-AC inverters "will allow Broadview to more consistently deliver a higher share of the 80 MW power production capacity"¹⁰¹ using a variable energy resource. Broadview asserts that, by configuring its facility in this way, in contrast to a typical solar project which has a capacity factor of approximately 25 to 30%, Broadview will be able to increase its facility's capacity factor to up to approximately 35 to 40%.¹⁰² Specifically, Broadview explained that its facility can sustain its maximum net output for more daylight hours, even when the sun is not at full strength, and it can continue to deliver up to 50 MW of power from the battery system even when no sunlight is available.¹⁰³ Moreover, PURPA contains no limit on the amount of energy over time that a facility may generate, so long as a facility's power production capacity is no more than 80 MW.¹⁰⁴ The fact that a new facility design can generate more energy over time than one composed of solar panels alone does not reflect non-compliance with PURPA, but rather simply that technological developments have enabled a solar facility to be combined with energy storage to generate more energy over time while remaining an eligible qualifying facility under PURPA. Consistent with PURPA's purpose to "encourage" the development of QFs,¹⁰⁵ the novel aspects of Broadview's facility will increase its value, as compared with other generators including other QFs, like those using biomass or waste, that because of their fuel can more consistently deliver 80 MW of AC electricity to their points of interconnection in all hours.

30. Finally, the Commission has not created a policy that "any facility, regardless of size, can apparently qualify as a small power production facility" if it can afford the

¹⁰⁰ *Id.* at 15.

¹⁰¹ March 2021 Order, 174 FERC ¶ 61,199 at P 32.

¹⁰² Broadview October 17, 2019 Answer at 5. (citing Broadview 2019 Application, Attach. B, Aff. of Lloyd Pasley at 4). *See also id.*(explaining that "to maximize the Facility's capacity factor and to be able to produce during non-daylight hours ... mitigates reliability concerns inherent with integration of solar projects.").

¹⁰³ Broadview 2019 Application, attach. B., Aff. of Lloyd Pasley at P 11.

¹⁰⁴ 16 U.S.C. § 796(17)(A)(ii); 18 C.F.R. § 292.204(a).

¹⁰⁵ 16 U.S.C. § 824a-3.

equipment needed to “artificially” limit output to 80 MW at any given time, as EEI claims.¹⁰⁶ Broadview has explained how these components increase the facility’s ability to sustain an output of up to 80 MW for additional hours in the day.¹⁰⁷ In this regard, we emphasize again that, as the Commission explained in the March 2021 Order, “any solar-PV QF can produce power for delivery to the purchasing utility only to the extent enabled by the inverters because the grid operates predominantly using AC power.” The bank of DC-to-AC inverters physically enables the integrated facility to “send out” a maximum of 82.5 MW of AC power, before deducting certain losses.¹⁰⁸ Broadview’s configuration is not “artificial” or otherwise impermissible: it cannot produce grid-useable power without the inverters as they are an integral and essential component of its facility. Put another way, if the Broadview facility did not include any inverters, the 160 MW of solar panels would be able to deliver 0 MW of power production capacity to the point of interconnection with Northwestern. Broadview cannot increase the facility’s send out unless Broadview physically adds additional DC-to-AC inverters (in which case Broadview would have made a material change in its facility and would need to seek recertification).¹⁰⁹

3. Aggregating Small Power Production Facilities at the Same Site

31. PURPA and the Commission’s regulations require that we add together the power production capacity of a facility seeking certification and the power production capacity of “any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site.”¹¹⁰

32. On rehearing, NorthWestern cites *Luz Development and Finance Corporation*¹¹¹ for the position that a battery is a separate facility that must be combined with the generation resource in order to determine the total nameplate capacity of the facility

¹⁰⁶ EEI Rehearing Request at 15-16. EEI similarly describes the practical effect is “to impose a requirement on utilities to purchase energy from increasingly large resources, without consideration of the rated capacity of the resource, as long as the resource does not place more than 80 MW onto the grid at one time.” *Id.* at 15.

¹⁰⁷ Broadview 2019 Application at 4.

¹⁰⁸ *Id.* at 4-5.

¹⁰⁹ *Id.* at 6-7; see 18 C.F.R. § 292.207(d).

¹¹⁰ 16 U.S.C. § 796(17)(A)(ii); 18 C.F.R. § 292.204(a)(1).

¹¹¹ 51 FERC ¶ 61,078 (1990) (*Luz*).

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seeking certification as a QF.¹¹² NorthWestern claims that the Commission failed to consider this precedent.¹¹³ NorthWestern states that, under the Commission’s regulations, the Commission must combine both the power production capacity of Broadview’s solar PV array and, separately, the power production capacity of Broadview’s battery system.¹¹⁴ By this method, NorthWestern calculates a sum of 130 MW, exceeding PURPA’s 80-MW limit.¹¹⁵

33. The aggregation requirement is not triggered in this proceeding. There is no “other” small power production facility at the same site, only Broadview’s hybrid facility. NorthWestern’s reading of *Luz* is inaccurate. In that case, the Commission addressed the question whether a stand-alone battery system was eligible for certification as a QF. *Luz* did not address the question whether a battery storage system that is integrated with a solar PV system must be considered a separate QF from the solar PV system.

34. In the March 2021 Order, the Commission explained that “the Broadview facility is not actually capable of providing more than 80 MW at any one point in time at its point of interconnection with NorthWestern.”¹¹⁶ Both Broadview’s solar PV array and its battery system operate in DC power and both are upstream of a single pathway through the DC-to-AC inverters to the interconnection with NorthWestern.¹¹⁷ NorthWestern is mistaken to claim that precedent requires the Commission to find that the solar PV array’s net output must be added to the battery storage system’s net output.¹¹⁸ It is not possible for the solar PV array and the battery system to have a power production capacity of more than 80 MW at any one point in time at the single point of interconnection with NorthWestern. Accordingly, the Commission need not treat Broadview’s battery as a separate facility that must be combined with the generation resource in order to determine the power production capacity under PURPA.

¹¹² NorthWestern Rehearing Request at 8-9.

¹¹³ *Id.* at 6-7.

¹¹⁴ *Id.* at 7-8 (citing 18 C.F.R. § 292.204(a)(1)).

¹¹⁵ *Id.* at 8.

¹¹⁶ March 2021 Order, 174 FERC ¶ 61,199 at P 32.

¹¹⁷ Broadview 2019 Application at 4, 5

¹¹⁸ NorthWestern Rehearing Request at 8.

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The Commission orders:

In response to EEI's, NewSun's, NorthWestern's, and SEIA's requests for rehearing, the March 2021 Order is hereby modified and the result sustained, as discussed in the body of this order.

By the Commission. Commissioner Danly is concurring in part and dissenting in part with a separate statement attached.

Commissioner Christie is dissenting.

(S E A L)

Kimberly D. Bose,
Secretary.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Broadview Solar, LLC

Docket No. QF17-454-007

(Issued June 17, 2021)

DANLY, Commissioner, *concurring in part and dissenting in part:*

1. The Commission's order today upholds its prior ruling¹ that Broadview Solar, LLC's (Broadview) facility satisfies the statutory 80 MW power production capacity limit even though Broadview's own Form 556 filing shows that the facility has a power production capacity of approximately 155 MW.² I dissent from the central holding in today's order that the actual power production capacity of Broadview's facility is irrelevant because the facility is designed so as to be capable of delivering no more than 80 MW to the point of interconnection at any particular time. As I explained in my dissent to the March 2021 Order, not a single word of the Commission's "for-delivery-to-the-utility" standard, which was adopted in the March 2021 Order, appears anywhere in the text of the Public Utility Regulatory Policies Act of 1978 (PURPA) establishing the 80 MW power production capacity limit.³ As I explained in my dissent to the March 2021 Order, not a single word of the Commission's "for-delivery-to-the-utility" standard, which was adopted in the March 2021 Order, appears anywhere in the text of the Public Utility Regulatory Policies Act of 1978 (PURPA) establishing the 80 MW power production capacity limit.⁴ Nor, as I also explained, does this standard find any support in the Commission's regulations or precedent.⁵ Nothing in today's order causes me to revise my opinion on these issues.

2. I do, however, agree with the Commission's rejection of NorthWestern Corporation's argument that Broadview's 50 MW battery storage system must be considered part of the Broadview facility's power production capacity,⁶ albeit for

¹ See *Broadview Solar, LLC*, 174 FERC ¶ 61,199 (2021) (March 2021 Order).

² See *id.* (Danly, Comm'r, dissenting at P 4).

³ *Id.* (Danly, Comm'r, dissenting at P 9).

⁴ *Id.* (Danly, Comm'r, dissenting at P 9).

⁵ See *id.* (Danly, Comm'r, dissenting at P 1).

⁶ See *Broadview Solar, LLC*, 175 FERC ¶ 61,228, at PP 31-34 (2021).

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somewhat different reasons. In my view, batteries (and other storage systems) cannot be included in determining the “power production capacity” of a facility because, by definition, batteries (and other storage systems) do not “produce” power but simply store it for delivery at a later time. There is no more support in the statutory language of PURPA for Northwestern’s position that batteries must be included in a facility’s power production capacity than there is in the Commission’s position that it is a facility’s delivery capability, and not its actual power production capacity, that counts towards the statutory 80 MW limit.

For these reasons, I respectfully concur in part and dissent in part.

James P. Danly
Commissioner

JA295

CERTIFICATE OF SERVICE

Pursuant to Rule 25 of the Federal Rules of Appellate Procedure, I hereby certify that, on April 7, 2022, I electronically filed the foregoing Joint Appendix with the Clerk of the Court for the U.S. Court of Appeals for the District of Columbia Circuit by using the appellate CM/ECF system, and served copies of the foregoing via the Court's CM/ECF system on all ECF-registered counsel.

Date: April 7, 2022

/s/ Jeremy C. Marwell

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